

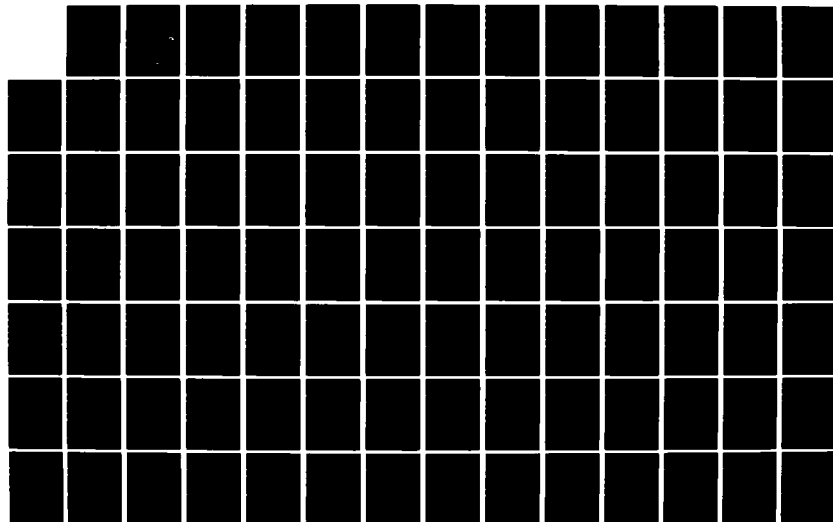
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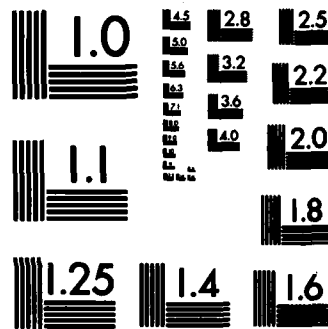
MEASUREMENT AND ANALYSIS OF SOLDIERS' VALUE SYSTEMS
CHANGE DURING INFANTRY INITIAL ENTRY TRAINING(U) ARMY
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MEASUREMENT AND ANALYSIS OF SOLDIERS' VALUE SYSTEMS
CHANGE DURING INFANTRY INITIAL ENTRY TRAINING

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FINAL REPORT
DECEMBER 1982

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the requirements for the degree of Master of Arts in Communication

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This study attempts to determine if there is a change in soldiers value systems after completion of Infantry One Station Unit Training using a modified Rokeach Value Survey. The review of the literature covers material concerning human values that relates to performance and effectiveness in an organization. The study indicates a modest reshaping of soldiers' value systems, particularly terminal values, in consonance with the Professional Army Ethic. There are no major statistically significant changes in values.			

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TITLE: Change During Infantry Initial Entry Training

AUTHOR: Captain John C. Krysa

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DEDICATION

To my children

J. D. and Becky

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CHAPTER I

INTRODUCTION

The study of organizational communication must at some point, address human behavior as it affects the performance of the organization. Literature on the subject, originating from many diverse disciplines, frequently makes reference to human values and value systems. Values are discussed in a variety of contexts such as motivation, conflict, institutional norms, interpersonal relations, leadership and barriers to communication. This thesis will examine the treatment of human values found in many different sources and then present a study of the value changes in the participants of an institutional training program. While the focus is upon one program of one organization, any large institution may share some implications that concern their organization.

Organizational communication is defined by Faules as "exchange in an open system whose parts are related to its whole and to its environment" (1976:67). He identifies the values of individuals, organizations and environment as factors that may impinge on that exchange. The interaction may be between individuals, an individual and the organization, between organizational elements or the organizational system and its environment. He defines values as the criteria or standards by which an individual selects a behavior despite his desires. Thus, the study of values is a most important factor in the study of organizational communication.

This study does not purport to be a totally new approach to the field of communication. The leading manuscript published in Communication Yearbook 3 is "Value Theory and Communication Research: Review and Commentary" (Rokeach, 1979:7-29). In this article, the author, Milton Rokeach, states the following: "The research reviewed here suggests that it is possible to bring about socially-desirable long-term changes in values and in related attitudes and behavior . . . and that such changes can be brought about by a single experimental session. Messages in such a session may issue forth from a human experimenter, an interactive computer, a closed-circuit television set or the printed word and they may reach single or many persons. Variations in the prestigefulness of source, the channel of communication or the personality of the receiver do not seem to make much difference: long-term effects are reported to occur regardless of such differences" (p. 24-25). The focus of this communication article is on the conceptualization and measurement of values.

Milton Rokeach is the central figure in much of the relevant work on values. This study looks to Rokeach for fundamental grounding. He has written in depth about values and has presented his work quite comprehensively in three published volumes. His studies were found to be most useful because of his clarity of presentation and understanding of the subject. This will be addressed in greater detail later. Rokeach offers the following definitions (1979:48):

A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.

A value system is an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance.

Terminal values refer to beliefs or conceptions about ultimate goals or desirable end-states of existence that are worth striving for . . .

Instrumental values refer to beliefs or conceptions about desirable modes of behavior that are instrumental to the attainment of desired end-states . . .

A number of academic projects and organizational behavior studies have accepted his work and applied the Rokeach Value Survey Instrument. They include a study by Andrew F. Sikula (1972) of governmental employees indicating that personalities within certain occupations and careers have unique value system characteristics; a Ph.D dissertation by Dee Wursten Henderson (1973) measuring the change in value systems in resulting from participation in a management development program; and a research project by the U.S. Army Research Institute (ARI:1981) comparing the differences in value systems between successful senior field grade infantry officers, experienced company grade infantry officers, newly commissioned infantry lieutenants and a national sample of civilians. In each of these studies the Rokeach Value Survey was the central instrument employed to examine the value systems of groups of people.

The Rokeach Value Survey, as published, is a two-part instrument listing 18 terminal values and 18 instrumental values in alphabetical order. The respondent is to rank order each list according to the importance of the values as guiding principles. In an academic review of the instrument Kitwood (1976:1033) states:

. . . The Rokeach Value Survey is more directly concerned with values, as philosophically understood, than most, if not all, other instruments.

The Army Research Institute modified this instrument for their study by the addition of a terminal value and an instrumental value appropriate to the military (ARI:1981). In addition, the respondents were asked to rate rather than rank, each value on a 7-point scale. The results were compiled and a group rank order was determined from the arithmetic mean for each value.¹

This study will examine the change in value systems of young men who have enlisted in the U.S. Army as infantrymen. Specifically, it will measure the change that results from completing the 13-week, one station unit training program (OSUT) at Ft. Benning, Georgia, that trains civilians to become technically proficient, physically fit and disciplined infantrymen for the Regular Army and reserve components. The study intends to find answers to the following questions:

1. Is there a significant change in the values of the soldiers who complete this training program?
2. Does the training change their terminal values as well as instrumental values?
3. Are there demographic characteristics, such as age or component or education, affecting differential degrees of value changes?

As a professional infantry officer with seven years experience, this researcher was in an outstanding position to conduct the study. A quasi-experimental method of research was employed. A field study was conducted to gather the initial data at Fort Benning, Georgia from 25 July - 31 July 1982 using a modified Rokeach Value Survey similar to the one used by ARI.² Arrangements were made for subject unit commanders to administer the survey again in October 1982. One training company of over

170 soldiers was selected as the experimental group to be administered a pre-test at the start and a post-test at the conclusion of training. Two other companies were selected for post-testing only for comparison and control. All surveys were administered in a classroom setting and returned to the University of Wisconsin-Stevens Point for processing and statistical analysis. The sample is limited to male, infantry trainees and the results can reasonably be generalized for participants of U.S. Army Infantry one station unit training. This training is conducted only at Fort Benning, Georgia. The implications of this study may be relative to other branches, programs or organizations but the data is only representative of Infantry OSUT soldiers.

In order to fully comprehend the basis for this study, it is necessary to be cognizant of a recent emphasis on individual values. The subject of professional ethics and values has traditionally related to the highly educated, the leadership or the elite of organizations, institutions and professions. Authors of both civilian and military professional publications are addressing the importance of understanding the values of individual organization members with increasing frequency. This concern about the values of individual soldiers in the U.S. Army today is reflected in emphasis being placed upon a philosophy of leadership for the 1980's that differs from that of the previous decade.

The most recent publication of The Army (FM 100-1, 1981) describes the purpose and function of the organization. It includes an explanation of the professional Army ethic and value set that reflects the ideals of two influential general officers, General Meyer and General Starry.

. . . The fundamental principles which have served to guide fighting men at the pivotal edge of battle have remained relatively constant . . . these timeless principles of war are essential ingredients of victory in battle . . . however, they cannot alone support the foundation of a modern U.S. Army in service to the nation. These must be harnessed to a set of values and ideals - a professional ethic - consistent with our nation's heritage and linked to our national goals and objectives while personal value systems or ethics may vary from individual to individual, professional integrity demands of each soldier an uncompromising commitment to those institutional values which form the bedrock of our profession (FM 100-1, 1981:23)

The Chief of Staff of the Army, General Meyer, wrote in a recent article, "We are an institution strengthened by our values" (1980:11-17). He cites a gap between essential military values and those of the civilian sector. The essence of professional military values are found in four obligations as he views them.

- . Personal Responsibility: full and complete discharge of assigned tasks.
- . Selfless Service: a unique burden of unlimited personal sacrifice.
- . Loyalty to the Unit: cohesion.
- . Loyalty to the Institution: obedience and disciplined performance, disagreement only up to the decision point, founded on common objectives with clear goals and responsibilities.

Meyer maintains that those values must govern the organization members' actions in all facets of their activity. This unique value system is essential to the Army because that organization is "called upon to accomplish a task which is fundamentally anti-social by all measures and

not easily reconciled to counterpart functions in the civilian world" (1980:14).

In a similar article another influential officer, General Starry, as the Commander of the Army Training and Doctrine Command, wrote of his approach to military values (Starry, 1980). He summed them into four like categories: professional competence, commitment, candor and courage. The single most important factor in individual performance, he espouses, is motivation which comes from values, shared hardship and leadership. Values must be addressed during peace-time because "the battlefield is the ultimate stage upon which the evaluation of values takes place. Sociologists speak of values; soldiers know and live values . . . soldiers have a way of quickly discarding the worthless and unimportant and getting down to basics" (p. 44). He concludes his article on values with the statement that the professional values are the "bottom line", "where we are coming from", citing "successful leaders and soldiers at all levels do hold fast to these values" but admitting "we have not been entirely successful in instilling these values institutionally" (pp. 44-45).

The Army Chief of Staff, General Meyer, provided a personal letter of advice and encouragement regarding this study, in which he wrote about the process of "soldierization" and the intended goals of initial entry training (See Appendix A). He felt that value change, in a program designed to achieve specific levels of competence in measurable military skills, may be the most important and overlooked product.

The following is taken from a draft reference book prepared by Captain Robert A. Fitton for a leaders development program on values at

the Army Command and General Staff College:

Values can serve as a "guiding star when the night and visibility are blackest." Because our profession may demand the most, in the most trying of circumstances, every soldier must operate from a common bond of understanding and trust in order to sustain his confidence in himself, his buddies, his leaders and his unit.

Historically, values have played an important role in combat, and unit histories abound with pertinent examples. The following action demonstrates selflessness and loyalty to the unit and to fellow soldiers that must be characteristic of our Army.

Early in the morning of 18 May 1966, a reinforced North Vietnamese company attacked Company B, 2d Battalion, 12th Cavalry, 1st Cavalry Division (Airmobile), which was manning a defensive perimeter in Vietnam. The surprise onslaught wounded five members of a 6-man squad caught in the direct path of the enemy thrust. SSG Jimmy G. Stewart became a lone defender of vital terrain, one man against a hostile platoon. Refusing to take advantage of a lull in the firing that would have permitted him to withdraw, SSG Stewart elected to hold his ground to protect his fallen comrades and prevent an enemy penetration of the company perimeter. As the full force of the platoon-sized main attack struck his position, he fought like a man possessed, emptying magazine after magazine at the determined, on-charging enemy. The enemy drove almost to his position and hurled grenades, but SSG Stewart retrieved and threw back the grenades. Exhausting his ammunition, he crawled under intense fire to his wounded team members and collected ammunition they were unable to use. Far past the normal point of exhaustion, he held his position for 4 hours and through 3 assaults, decimating the enemy as they approached and before they could get a foothold. As a result of his defense, the company position held until the arrival of a reinforcing platoon that counterattacked the enemy, now occupying foxholes to the left of SSG Stewart's position. After the counterattack, his body was found in a shallow hole where he had advanced to add his fire to that of the counterattacking platoon. Eight enemy dead were found around his immediate position, with evidence that 15 others had been dragged away. The wounded, whom he gave his life to protect, were recovered and evacuated.

There is no way of knowing what SSG Stewart's values were, how he would have expressed his values verbally, whether his values motivated him to act heroically, or how he acquired those values. Certainly his actions demonstrated courage, self-sacrifice and loyalty to unit. Somehow, somewhere, sometime,

he acquired those values. SSG Stewart was posthumously awarded the Congressional Medal of Honor for his devotion and sacrifice (Fitton, 1982:1-4).

CHAPTER II

REVIEW OF THE LITERATURE

The scholarly treatment of values has a long and detailed history. From ancient philosophers to modern-day organizational behavior specialists almost every discipline has conducted some exploration of human values. This chapter will examine some of the current literature on values from a variety of sources and academic fields. Of particular concern are those items that can be related to human behavior within an organization.

Search Procedure

This search for information employed three main procedures; a manual search, an electronic data base search and correspondence with likely resources. The manual search involved bound library references including Communication Abstracts, Current Index to Journals in Education, Dissertation Abstracts and Sociological Abstracts. In addition, the indices of a variety of organizational development and communication related journals were reviewed. A productive on line search of electronic data bases was conducted at the U.S. Army Infantry School Library using the DIALOG network and the Defense Technical Information Center (DTIC). Civilian sources searched through DIALOG were ERIC, CLUE, OATS, SOCIAL SCISEARCH and Sociological Abstracts. A previous DTIC search conducted by mail through another University of Wisconsin campus was not as productive as the on-line search. The third procedure, communication with likely resources resulted a number of useful items. Queries were

directed to the Army Research Institute, Army Command and General Staff College, American Society for Training and Development and to the authors of particularly apposite works on values: Meyer (1980), Narel (1981), Schultz (1982) and Sikula (1972). The material from deliberate study and cross referencing of sources was continually added to by chance and random encounters with relevant items of information.

Theoretical Description

A noted communication author, David Berlo (1960), viewed communication as a dynamic process of continuous interaction. In this perspective he explained that a large number of factors are involved in the interaction, with a continuous influence being exerted among each of the factors. A holistic explanation of valuing by Hall (1976) relates to this process. In an academic treatment of values he is concerned with the process of interaction of an individual with elements of his environment.

Any person, relationship or object which, when freely chosen and acted upon, contributes to the self, meaning and enhances its growth . . . The act of valuing is the stance the self takes towards the environment such that the self acquires meaning and the creative development of both the self and the environment is enhanced. (Hall, 1976:24)

Values have been defined in a variety of ways depending on the perspective of the author. In a study of American societal values, Kurt Baier (1968:35-37) cites several different definitions including:

- . "A conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available means and end of action" (Clyde Kluckhohn).
- . "A thing has or is a value if and when people behave toward it so as to increase or retain their possession of it" (George Lundberg).

- . "Anything capable of being appreciated (wished for) is a value " (Robert Part and E. W. Burgess).
- . "By a social value we understand any datum having an empirical content accessible to the members of some social group in a meeting with regard to which it is or may be an object of activity" (Zananiecki).
- . "The desirable end states which act as a guide to human endeavor or the most general statements of legitimate ends which guide social action" (Neil J. Smelser).

A study of organizational members personal values to understanding differences in the work environment by Simcha Ronen (1978) reports the following:

- . Values are considered as needs in job-satisfaction research (Locke, 1969).
- . Values are defined through the job characteristics which represent high sources of satisfaction (Katzell, 1964).
- . Values are defined through vocational interests (J. O. Crites, 1961).
- . Values are derived from the Protestant Work Ethic (Wollack, 1971).
- . Values are defined through the meaning attached by individuals to a specific set of concepts (England & Lee, 1974).
- . Values are viewed as the importance attached to jobs in general (Kilpatrick, Cummings & Jennings, 1964).

In a discussion of values, two other authors make noteworthy comments. Davis (1972:84-86) makes the distinction between economic and human values. Economic values deal with the allocation of scarce resources that have definite limitations while human values are incremental. He explains that human values, such as growth and fulfillment, can be shared by employees without taking them away from anyone. Benne (1976:496-8) differentiates between "substantive values", those relating to the process determining action.

A widely accepted and acknowledged values researcher is Milton Rokeach. He first viewed values as "abstract ideals, positive or negative, not tied to any specific object or situation, representing a person's beliefs about modes of conduct and ideal terminal modes" (Rokeach, 1968:160). In a subsequent text he expands his theories about the nature of the individual and offers the following assumptions:

- . The total number of values that a person possesses is relatively small.
- . All men everywhere possess the same values to different degrees.
- . Values are organized in value systems.
- . The antecedents of human values can be traced to culture, society and its institutions and personality.
- . The consequences of human values will be manifested in virtually all phenomena that social scientists might consider worth investigating and understanding.
(Rokeach, 1971:3)

Rokeach also offers the following:

- . A value is an enduring belief that a specific mode of conduct or end - state of existence is personally or socially preferable to an opposite or converse mode of conduct or end - state of existence. A value system is an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum or relative importance.
(Rokeach, 1971:5)

Values are more basic than attitudes. There are many attitudes about many different objects but only a small number of values at the foundation. Rokeach (1971) explains that an individual may have thousands of attitudes but has only several dozen values. They are much more lasting and stable than are attitudes. Lazar (1973) substantiates this perspective and states values "are human expressions of how human beings relate to the world around them" (p. 252). According to Nelson

(1974) values are the central guides to peoples actions. Individuals make decisions dependent upon facts, values and available information which is commonly a mixture of facts and values. (pp. 19-20)

A former management professor of mine, Andrew F. Sikula, himself a student of Rokeach and an accomplished values researcher, further explains the concept of values.

Values represent "wants" or preferences. Values describe what individuals consider to be important. Values represent wants, preferences, likes and/or dislikes for particular things, conditions or situations. A person's values describe the things or ideas that matter most to him, things which he will strive and sacrifice for in order to obtain. Values consist of opinions about what is right, fair, just or desirable.
(Sikula, 1972:7)

Sikula later explains that values actually do affect behavior and are important determinants of individual, group and organizational behavior.

- . An individual can make an inference about his relationship to an object without directly encountering that object based upon information gained from a previous encounter with an object of a like category.
- . Values can direct perception and behavior by causing an individual to notice certain characteristics of an object and to react to the object on the basis of those characteristics.
- . Once developed, a system of values constitutes a ready-made format for future thinking and behavioral responses. A system of values, accordingly, serves as a frame of reference.
(Sikula, 1973:306)

Charles Knicker (1977) quotes Rokeach's conclusion that "a value, unlike an attitude is a single belief that guides action and judgments." Thus a value is an imperative to action (Knicker, 1977:32). This definition is in two parts: it accepts the concept that beliefs, attitudes

and values are interdependent but separate and secondly, it adopts the position that valuing cannot be isolated from acting. (pp. 32-33)

In an article about values research in organizations, Connor and Becker (1975) attempt to clarify the relationship between values, attitudes and beliefs. They begin by citing Rokeach's definition of values as "abstract ideals" not object or situation specific that "underlie attitudinal and behavioral processes" (p. 551). Attitudes, however, are focused upon specific objects and situations. They constitute "cognitive and affective orientations" that may explain the occurrence of specific behaviors in specific situations. Behavior then becomes a manifestation of values and attitudes (Connor & Becker, 1975:551).

A means of ordering values is provided by a series of dimensions proposed by Kluckhohn (1962). He offers eight dimensions:

1. modality: positive and negative values.
2. content: aesthetic, cognitive and moral values.
3. intent: values relating to an approved manner in which an act is to be carried out.
4. generality: some values are specific to a situation or area, others are thematic.
5. intensity: the strength of a value.
6. explicitness: values can be viewed along a continuum running from the explicit to the implicit.
7. extent: values can be of a personal or group nature.
8. organization: values are viewed as existing in groups, orientations or clusters and arranged according to a relative hierarchical ranking or ordering. (Kluckhohn, 1962:413)

This manner of ordering values was illustrated in a summary report of a recent inter-university seminar on ideal American military values by

Girdon (1980). Rather than a single definition, the seminar developed a descriptive checklist using the work of a variety of scholars, primarily Rokeach, under Kluckhohn's dimensions.

In a study for the Office of Naval Research, England (1970) makes the following assertions:

- . Personal value systems influence an individual's perceptions of problem situations he faces.
- . Personal value systems influence an individual's decisions and solutions to problems.
- . Personal value systems influence the way an individual looks at other individuals and groups of individuals thus influencing interpersonal relationships.
- . Personal value systems influence the extent to which an individual will accept or resist pressures and goals of military life and military functions.
- . Personal value systems set the limits for the determination of what is and what is not ethical behavior by an individual.
- . Personal value systems influence not only the perception of individual and institutional success, but its achievement as well.
(England, 1970:1-2)

All of the previously cited theoretical descriptions, definitions, and assumptions serve to illustrate the significance of values in a study aimed at understanding human behavior. It is not only the academic looking for a conceptual understanding who turns to the subject of values. Having addressed some rather theoretical concepts, it is appropriate to examine some of the more pragmatic applications of human values in relation to performance and behavior.

Values and Performance

Complex organizations in the business arena continually seek ways

of understanding and improving individual, managerial and organizational performance. Value theory is found interwoven in many contexts of performance examination. Concerned with results-oriented training for sales personnel, Nouzo (1980) has written an article describing value-oriented sales training. In a study of individual workers in regards to relationships between job scope, job satisfaction and satisfaction with the work itself, Stone (1975) uses work related values as a central factor and presents their implications for job enrichment programs. The improvement of conditions in manufacturing organizations through participative management is the goal of a study by White and Ruh (1973). They investigated the effects of individual values on the relationship between worker participation in decision-making and job attitudes, finding consistently positive and significant correlations.

Some recent advertising and media research provide two examples of the use of values. Marketing strategy/advertising research by Boote (1981) provides evidence of the validity and utility of using people's values as a marketing information tool. He reports of a segmentation analysis based upon a prediction model consisting of four categories of variables: personal values (instrumental), salient product attributes, brand preference and brand choice. (p. 30) The implication was that appeals used in advertising copy should incorporate personal values of the target segment with certain traditional techniques (p. 35). An investigation of values and consumer-choice behavior was conducted by Becker and Connor (1981). They suggest that personal values influence people's media-usage behavior and relate the implications to advertising-campaign platforms and themes. (p. 42)

The U.S. Navy is on record as having the most value-related research in conjunction with performance. A study of the leadership climate of the fleet by Maynard (1974) was related to values. He found that initial training was successful in instilling traditional military values, but that the leadership climate found by sailors after reporting to duty had a negative effect. Anderson (1974) wrote of conflicting values that posed special problems to some recruits. Of concern were values that guided their lives prior to induction but were found to be in conflict with military life and their new environment. A series of reports by Griffeth (1979) and Mobley (1978) examined the role of value orientation in predicting performance such as success or failure in training and the intention to re-enlist. Barrett (1975) also looked at the prediction of performance in a study of retention based on work values. While not clearly performance-oriented, the noted values researcher, George England (1970) conducted a project for the Navy aimed at measuring, describing and understanding the value systems of officers.

Measurement of Values

There exists a number of instruments to measure values or describe a particular values orientation of the respondents. In the development of a personal values questionnaire England (1970) offers the following theory that applies to most, if not all, other instruments:

meaning attached to a set of concepts by an individual

yields

description of the personal value system of an individual

yields

propensities to behave in predictable ways

(England, 1970:2)

A number of instruments appear frequently in the description of values research including the Cornell Study of Values, the Hartman Value Inventory and the Allport - Vernon-Lindzey Study of Values. One of the most widely used instruments is the Rokeach Value Survey.

Rokeach (1973:52) writes of the instrument:

It yields separate quantitative measures of values and systems of values It can also be used in a purely empirical manner to describe similarities in and differences between any two groups The Value Survey can be meaningfully employed across all the social science disciplines to provide data that are substantively relevant to each discipline.

The Rokeach Value Survey has been successfully used to measure the change in value systems resulting from a training program as shown by Henderson (1973) for executive development and Vaughn (1975) for a racial awareness program. It has also been modified for the specific purposes of other studies where it was not appropriate in its original form. An approved modification is evidenced in the Army Research Institute study of officers in 1980 where the lists of values are rated on a scale and the arithmetic mean computed to determine each group's unique rank order.

Individual Values

The values of individuals within an organization are important when examining their relationships with others. Inter-personal communication is a fundamental area in Ruesch and Bateson's (1951) work on the levels of communication as presented by Littlejohn (1978:43-47). At the second level (inter-personal) of their classic model two systems, codification and value, are closely intertwined in a process they refer to as "codification-evaluation." An individual perceives actions or codifies

messages and shapes his own communication in keeping with his own value system.

A number of authors have presented research into the specific values and value systems of various management and worker positions within industry, service education and government. In a study by Manley and Manley (1978) the results were consistent with a theory that "groups of professions and members of organizations possessing similar organizational goals will tend, in the aggregate, to hold similar values and goals operative" (p. 107). School superintendents and psychologists held similar value systems but the former had higher rankings consistent with administrative concerns while the latter ranked higher on individualism. Considerable work has been done by Sikula (1971-1980) in the area of describing the unique value systems of persons in a number of occupations. Sikula (1973) showed that managers in general place a higher priority on competency and initiative values than do workers. A study of workers in different types of industry by Ronen (1978) found differences in the two groups and showed the relationship of personal values to aspects of job satisfaction. In a study of value integration in the military Blair (1978) shows that career-oriented soldiers are consistently more positive of occupational values than non-career soldiers and career officers were even more so. A project by Butler (1971) involving graduates from the U.S. Military Academy and other universities, class of 1950, shows a clear relationship between values and subsequent goals.

In an article on values and ethics within a profession, Smith (1982) explains that in the examination of an ethical decision, "the ethics part tracks back to the values of the decider" (p. 11). While personal

values are important to a profession, the people not the profession are ethical. " . . . People can make their profession the symbolic repository of their ethics and values" (p. 11)

The value approach in understanding others was best presented in a video tape production by Morriss Massey, "What You Are Is Where You Were When." His practical method of explaining the behavior of others that is different from our own is based on values. Individuals are value programmed differently, depending upon where and when they went through the stages of value processing. "Imprinting" occurs from birth to age seven where children learn from observing their surrounding environment. "Modeling" follows until the early teens as youngsters identify and mimic heroes and role play. During the teens or "socialization" young adults seek acceptance and do the normal things everyone else is doing. After age twenty, most people's values are set. They are changed only by a "Significant Emotional Event." An example of his analysis of generations by decade and the influential events is as follows:

People in their late 50's and early 60's in 1980 formed their values during the 1920's and 1930's. They are establishment: directors of major corporations, educational institutions and governmental organization. They are extremely patriotic because of our nation's involvement in WWI and WWII. Stable neighborhoods and geographic limitations, as well as impact of the Depression, strengthened the value they place on the family. (Massey, 1975)

By using Massey's approach it is possible to understand differing views and values and better manage the differences that become barriers to change efforts. Other authors tend to support the principles involved. Pugh (1977) identifies nine steps in the human decision system. They include the reception of data, automatically assigning values to

experiences, storing or retrieving experiences from the memory, identifying objects or events with symbols and building and identifying relationships among symbols. (pp. 355-61) Sikula (1972) observes a similar function of values and further states: "Values can direct perception, causing an individual to notice certain characteristics of an object and react to the object on the basis of those characteristics" (p.15). Even when objectives are as well delineated as in an MBO program individual values serve as guidelines and a framework for interpreting them. Davis and Tannenbaum (1972) discuss the implications of this individual bias in the organizational development effort.

Acquisition of Values

Schultz (1982) cites the writings of Hall (1976, Resher (1969) and Knicker (1977) as viewing the acquisition of values as a process. Dewey (1939:30) states:

We commonly think of "learning from experience" and the "maturity" of an individual or group What do we mean by such expressions? At the very least, we mean that in the history of individual persons and of the human race, there takes place a change from original comparatively unreflected impulses in hard and fast habits to desires and interests that incorporate the results of critical inquiry. When this process is examined, it is seen to take place chiefly on the basis of careful observation of differences found between desire and proposed ends (ends in view) and attained ends or actual consequences.

Massey (1975) presents value programming as a means of understanding the acquisition of a person's values. Rao (1975) explains that values are learned and acquired by experience. This is shown in work by the Army Research Institute (1981) indicating differences in the values of officers at various stages of their careers. Cherrington (1982) writes that the continual acquisition and change does not stop with childhood development.

While the work values of most people are developed in youth, they can also be influenced on the job. People who have not developed positive work values in their youth can go through a similar developmental experience to learn initiative, responsibility, commitment and perseverance as an adult.

An organization can influence the individual values of its members. Schultz (1982) offers a model to change certain work related values for nurses. Gabriel (1979) advocates forms of ethical indoctrination. In a printout from a 1982 electronic conference net of Army Organizational Effectiveness consultants this point is made that certain values come from initial training or "soldierization." This allows the organization to build on a base established by family, peers and religion. They feel that the essence of values of the military force is derived from living and experience. Merely stating what the desired occupational values should be for soldiers will have little effect. The consultants feel that desired values are recreated by "eye ball communication and experience." This seems to be proven in a study by Grusky (1975) showing different patterns of values in those who were prepared for a position through attendance at a classroom training program as opposed to actual experience in an apprenticeship. Drisco (1977) writes that ethics cannot be taught but rather must be modeled and demonstrated by an organizations leaders. Gabriel (1979) warns that no value change will occur by lip service alone, that those people of influence in an organization must support the desired values and act in the appropriate manner.

In his most recent book, Rokeach (1979) explains that if there was a change in value systems then "perceived social support for values, attitudes and behaviors" is essential to sustain that change (pp. 19-21). This social support can come from the work group itself. The Bales'

theory of Interaction Process Analysis holds that in a large group, subgroups develop, consisting of individuals with similar value dimensions. This approach supports Rokeach's theory that for a value to undergo enduring change, it requires maintenance and reinforcement. Gabriel (1979) maintains that the critical aspect of an individual's willingness and ability to comply with new values is the degree of peer support that he receives. Greenbaum (1979) in a study of groups of combat soldiers, shows that individuals use others in the unit as a standard of comparison for values. Smith (1982) admonishes Army officers that "a solid base of values, consciously maintained and deliberately refined" is essential for the professional to be able to influence the situation. (p. 12)

Organizational Development

The organizational development (OD) consultant or change agent has many applications for values. The resource center of the American Society for Training and Development lists many associations that employ values as a vital part of their OD effort. Huse (1975) in his initial discussion of the change process, raises the issue of ethics in that the knowledge of behavior and sets of values can be misused in the "manipulation of others" in an improper manner. (p. 72-3) In a monograph for the American Society for Training and Development, Friedlander (1976) uses three sets of values to describe OD. He states that OD is a set of purposes "to explore and change a set of organizational dimensions in specific directions . . . also a set of values which express personal and professional judgments of what is worthy and worthwhile" (p. 24). The value approach is not just an ethical consideration, but conceptual

and pragmatic considerations as well. The Organizational Effectiveness consultants of the Army employ values in a number of interventions. Burns (1978) uses values to provide clarity in a "Management of Organizational Performance Workshop." The first of 7 steps in the design model is to determine the organizations' core values. Once a consensus is obtained the values serve to provide a common view of what is important and are used in describing future conditions. In research by Dalkey (1971) of the Rand Corporation using delphi procedures for group value judgments, the conceptual validity of Burns' workshop appears to be substantiated.

The influence of the personal values of an organizations' executives and managers on the organizations' operation is widely documented. In trying to explain behavior or conflict within an organization, we are inevitably led to managerial values which may be a reflection of the characteristics of the chief executives. McDonald (1975) maintains that a corporate chief executive will formulate objectives by having the values of the "inside players" as a basis for policy decisions. His corporate executive decision model is as follows:

- . Values of the players
- . Objectives (derived from values)
- . Policies (derived mainly from the objectives)
- . Outcomes
- . Pay-offs (McDonald, 1975:67)

Should the values of the "players" change or his assessment of the prevailing value systems be incorrect, serious conflict is likely to result and disrupt the entire organization. An example of this is that of millionaire J. Paul Getty in a 1967 planned merger. McDonald explains that to play the corporate game successfully, the strategic players must

understand one another's values. Getty did not do so and as a result he failed to build a nation-wide oil company at the retail level.

(pp.75-91)

Leaders may not have direct control over the individual decisions or beliefs of subordinates, but can influence behavior by changing laws, rules and structure. Behaviors most likely to be approved and rewarded are those which actualize the innate values of the leaders according to Pugh (1977). Clearly the values of those in control are going to influence what is acceptable behavior and what is in conflict with their beliefs. Bandura (1977) identifies censure of subordinates' behavior that is in keeping with subordinates' values as yet another type of conflict. If they continue the undesirable activities despite the sanctions against them, it is likely that they are convinced their position is uncompromisable and they will not be concerned with others' perceptions. According to Huse: " . . . in organizations existing in a relatively unstable and uncertain environment, it may be better to maintain the disparity of perceptions" (p. 243). In some cases, harmony and agreement may be dysfunctional and as such some conflict is good for the organization. Another organizational development author, Margulies (1972) argues that: "The existence of conflict can be viewed as a necessary, indeed a healthy characteristic of organizational life. The tragedy of organizational conflict results from the institutionalized tendencies to resolve conflict in non-productive ways rather than from the conflict itself" (pp. 26-8). Some difference is healthy as it may foster creativity, stimulate innovation and maintain an open perspective necessary for the organizations' continued existence. Azumi and Hage (1972) also address the possible problem in the relation between organization and

individual values. (pp. 31-3) It is not just an ethical issue but one of effectiveness on the part of the change agent. Kaufman (1971) makes the following admonition:

. . . Tearing down social institutions in order to rebuild them along radically different lines frequently disappoints the innovators. Not everything can be changed at once (pp. 90-1)

This is also voiced by Warwick and Kelman (1976) as they distinguish four aspects of social intervention.

1. The choice of goals to which the change effort is directed.
2. The definition of the target of change.
3. The choice of means used to implement the intervention.
4. The assessment of the consequences of the intervention. (pp. 471-2)

In looking at the application of value systems to bring desired changes and cooperation, Pugh (1977) reminds us that to be most beneficial, the system must be structured so that "when individuals act to achieve personal satisfaction in terms of their own innate values, they will be as successful as possible" (pp. 391-2). Thus, any structure change designed to align the goals of the individual with those of the organization must insure that the individuals values are being satisfied. Bennis (1970) is critical of a bureaucratic structure because it fails to do so. He states that because of increased levels of education and mobility "people will be more intellectually committed to their jobs and will probably require more involvement, participation and autonomy in their work" (p. 12).

Entrepenurial and Corporate Values

There is a vast amount of research reflecting two forms of organizational behavior, structure and performance based upon two different sets of characteristic values. Most of the literature using this approach is written by sociologists. The representative research presented below relates to the military.

Gabriel (1979) advocates a change away from entrepreneurial structures. The former stresses self-interest, material reward, profit motivation and immediately available means to compel conformity. The latter is typified by arational procedures and norms, community interest, recognition as a reward and diffused powers throughout the community. The corporative model places "greater emphasis on 'values' as opposed to 'interests' as motivating forces for individual behavior" (p. 91). These are illustrated by medals, awards, ceremonies, peer pressure, a sense of service and cohesion. Gabriel states that the military is not analogous to a modern business enterprise. The loyalties necessary for effective cohesion in battle are derived only from the values found in the corporative structure.

"Occupation" and "Institution" are the labels applied by Moskos (1977). The former is legitimated in the terms of the marketplace. The latter is "legitimated in terms of values and norms, a purpose transcending individual self-interest in favor of a presumed higher good" (p. 42). For the military to accomplish its mission it must adhere to the institutional model. Many of the institutional qualities of military life are being eroded; reduction of traditional benefits, separation of work and residence locales, reduced participation in

customary social functions, increased use of civilian contract technicians and menial service workers, and increased use of monetary inducements. Moskos warns that "attention ought to be focused on the root cause and not just on the overt symptoms" (p. 48).

In a study of the Canadian Army, Cotton (1981) examines the previous authors' arguments and attempts to measure the validity of Moskos' theory. He found that the majority of experienced military personnel advocated institutional values, especially in the combat arms. An earlier study of Canadian Armed Forces was done by Saleh, Toye and Sievert (1975) to examine the value differences of captains and majors and upper-middle and lower-middle industrial managers. The military tended to show a greater concern for intrinsic rewards. They cite that in some aspects, however, the military is similar to a business in that neither is "immune to change in social and cultural values" (p. 235). The cohesion of groups in combat is the focus of an article by Faris (1977) where a certain commonality of institutional type values is essential for effective combat performance.

A non-military study by Ronen (1978) applies the two value structures described above to that of the Kibbutz and private sector industries. In many ways the Kibbutz is similar to the military in that food, clothing, housing, medical care and recreation are provided on the basis of need. The inter-relationships of personal value systems and organizational reward systems are not surprising. Kibbutz workers show a higher level of self-realization values and satisfaction with intrinsic job attributes than those of the private sector. Thus, the thesis supported by the study states: "The main components of an individuals' motivational

set and job attitude depend largely on the system of social values with which he approaches the work environment and the organizational reward system" (p. 85).

Societal Values

A noted futurist, Joseph Coates, discussed the importance of impending societal change at a 1981 meeting of Army Public Affairs Officers. He spoke of three things: demographic change, technological change and value change. (Coates, 1981:18-19) One of the arguments was that the shift in values of the American Society is something that must be understood as it has implications not only for the military, but for corporate America as well.

The subject of changing national values is sometimes heard being discussed by those dissatisfied with some aspect of life or society in general. Changing societal values are also discussed and examined in an objective manner. Many astute and distinguished authorities have voiced concerned remarks. An article for Public Opinion Quarterly by Rokeach (1974) claims to relate the "first qualitative attempt to measure value change and stability in American society" (Rokeach 1974:234). A study by Hodge (1976) endeavors to document the pattern and change of traditional middle-class values in the 1950's, 1960's and 1970's. An article by Nielsen (1979) about the standards in higher education advocates a reassessment of fundamental societal values in the academic environment.

These concerns may be well founded. In a speech by Supreme Court Justice Lewis Powell, the admonition is made that "acts of non-compliance" are being accepted by a large percentage of the population, where in the past these were viewed as "irresponsible acts of misfits and looked upon

as despicable and entirely unacceptable" (Powell, 1972:752). A study by Phillips (1974) tends to substantiate those remarks indicating the "'now' generation challenges traditional ethics, values and social codes" (pp. 10-23). The implication is made that society and institutions must change their traditional view of authority.

Both civilian and military authors write of the differences between the values of society and the military. Goodpaster (1979) suggests that the military exists as an institution to serve and protect the national values as found in the Constitution and Bill of Rights, but that if the military institution reflects only social values it may not be able to function. (pp. 251-2) He quotes the remarks made by General Kerwin on his retirement in 1978.

. . . We must recognize that this military community differs from the civilian community from which it springs. The civilian community exists to promote the quality of life; the military community exists to fight and, if need be, to die, in defense of that quality of life. We must not apologize for these differences. The American people . . . are served by soldiers . . . disciplined to obey the orders of their leaders, and hardened and conditioned to survive the rigors of the battlefield. We do neither our soldiers nor the American people any favors if we ignore these realities.

Gabriel (1981) also maintains that these value differences must be recognized. The "values, ethos and behaviors" of the military need to be different and that a successful manner of organization must be "rediscovered rather than developed" (pp. 55-56). Groups of soldiers must have strong common values and traditions to be an effective combat force. He does not accept the argument that enlisted soldiers are not motivated, come from lower elements of society, reflect the values of the liberal, democratic, success-oriented capitalistic society and reject the traditional values of discipline and self-sacrifice. (p.65)

Instead, he states that throughout history soldiers have always been different from their host societies.

. . . That modern society provides poor raw material is not really a viable argument. (p. 65)

There exist cases where armies cohered because of shared values long after their society ceased to exist. He cites the Roman legions that "persisted and cohered in England for 365 years, a longer period than the white man has been in North America" (p. 65).

In a recent article, Meyer (1980) relates a commonly held view of the 1970's, expressed by many behavioral scientists, that the decade was one of anarchist philosophy and distrust that challenged the role of authority in peoples' lives and institutions. He continues with the theme that there is a gap between the values held by society at large and those necessary for an effective military force. The differences must be identified and desired values clarified and communicated.

The Professional Army Ethic

The drastic changing of societal norms during the previous decade presented many organizations and institutions with a challenge with respect to the effective use of human resources. The military was not immune to the effects of a different environment. The resulting tension is adeptly explained in an essay by Kelly (1981).

The perceived failure of the military in Vietnam and the failures of elected officials in the political arena generated a heightened awareness of military professional standards and ethical canons in the mid-1970's. However, the legal, medical and business professions experienced a similar awareness. These professions seem to suffer mainly in the service they render, that is, in their relationships outside the profession, but the Army seems to suffer internally as a result of ethical problems. The misuse of statistics or even subordinates for career enhancement are examples of internal malaise. (p. 23)

The situation that the Army faced was a difficult one. An article by Lane (1979) cites some of the reasons for an increasing interest in military ethics due to a perceived lack of professionalism during U.S. involvement in Vietnam; the body count syndrome, false reporting, and ticket punching. At the same time the Army was struggling with "zero defects" programs intolerant of human error and quantitative management systems that emphasized statistical over qualitative human performance. In addition, the nation lived with Watergate and questioned the integrity of public officials. Kelley (1981) refers to a number of studies regarding professionalism, values and ethics. Among them, he cites a 1970 study of professionalism by the Army War College that concluded there was a "significant difference between the ideal values and the actual or operational values" and a 1979 follow-up study that indicated no significant changes. (p. 37)

The Army entered the 1980's with the need to renew and modernize itself not only in terms of equipment and force structure, but with a different philosophy of leadership as well. As the newly appointed Army Chief of Staff, General Meyer (1979) wrote of the need to prepare to go to war "even if that means the acceptance of less than perfection in all things" (p. 18). He cites some of the things typically associated with the young people 18 to 23 years old who comprise more than one-half of the Army; materialism, permissiveness and individualism, but also the appeal of idealism, a craving for reasonable discipline and peer pressures for uniformity. In order for the Army to meet its goals, it needed to concern itself with individual soldiers. He concluded with the statement:

. . . Generations of Americans have rated experience in the service as a productive factor in their lives. If we expect to have appeal to tomorrow's youth, we need to nurture and improve the image, based on the reality that we as an institution contribute meaningfully to the maturation process of youth. (Meyer, 1979:21)

A shift in leadership doctrine begins there and can be seen in much of the professional literature. The professional journal for field grade officers of the Army, Military Review, devoted its entire July 1980 issue to leadership. In it, General Meyer states that "techniques which work well for the management of resources may prove disastrous when substituted for leadership on the battlefield. Management and leadership are not substitutes for one another" (p. 6). A division commander, Major General Ulmer, notes some of the essentials for leadership in the 1980's that include more time spent on analysis of the climate than on individual leadership methods and of the need to "assess our value systems . . . and pledge to move ever closer to what we know is right" (pp. 10-12).

In September 1980 an Ethics Task Force was formed to begin development of professional values and ethics training materials for all levels of the Army school system, starting with a standard program for pre-commission instruction by the U.S. Military Academy, ROTC and OCS. They were tasked to perform the preliminary efforts necessary for the integration of values and ethics training to be conducted by units Army wide.

A study was undertaken by an Army officer, Major Girdon, working with the Naval War College to "promote and sustain informed discourse" about current military values and ethics. (Girdon, 1980:196) It offers an excellent review of officers perceptions. He attempted to develop a model of ideal values for the Army. One of the results was a

foundation model of military values developed from General Officers' material. He consolidated the findings into four clusters below.

- . Duty - Honor - Country: Honor, ethics, duty and patriotism.
- . Professionalism: Comraderie, expertise, and honor/ethics.
- . Civil - Military: Conservative realism and civilian control.
- . Traditional: Discipline and values of the battlefield. (Girdon, 1980:194)

The October 1980 edition of Army, a journal circulated to all members of the military community including interested civilians and corporations, includes two key articles by General Meyer and General Starry. Those articles set forth the military values and soldierly qualities that are now part of the official doctrine known as "The Professional Army Ethic" (FM 100-1, 1981:23). This manual explains that the Army Ethic serves to "formalize the soldiers' philosophy and provide the value base for military service . . . to clarify how we differ from the broader society we serve . . . and builds upon those qualities which have come to be recognized as absolutely essential to success on the battlefield" (p. 25). This ethic consists of:

Loyalty to the Unit	Commitment
Loyalty to the Institution	Competence
Personal Responsibility	Candor
Selfless Service	Courage

With the distribution of that publication in August 1981, the interest in individual values and professional ethics became a clearly defined doctrine. Most of the subsequent professional literature reflects and refers to the ethic delineated in FM 100-1. Programs for the

management of human resources and development of leadership competencies incorporate those values. A new leadership manual (FM 22-100) is currently in draft and devotes a chapter to the professional Army ethic. This new reference intended for use by all Army leaders, but emphasizes troop leadership at the company level and below. Plans for the integration of values and ethics training were explained to the force in the February 1982 issue of Soldier Support Journal. A return to the regimental system of rotating units rather than individual soldiers was also publicized in 1982. Hartjen (1982) relates the motivation of soldiers assigned to regimental units to the commanders ability to influence the individual and his values. Finally, the Leadership Committee of the Command and General Staff College was designated in 1982 as the proponent agency for leadership, development of leadership training and the development of ethics doctrine curriculum and training Army-wide according to Brigadier General Saint (1982). The Army is serious in its efforts to provide effective and capable leadership to the individual soldier. That current effort is founded upon understanding and developing desirable values in its people.

Summary

The major findings of this chapter include:

- (1) A value is defined as an abstract ideal, freely chosen from alternatives, that is not object or situation specific.
- (2) An attitude is the reflection of values in regard to specific objects or situations.
- (3) Values are organized into value systems.
- (4) Value systems influence perceptions, decisions, relationships, and determine what is ethical for individuals.
- (5) Instruments can measure differences and similarities in personal value systems by offering a set of concepts that describe values.
- (6) Behavior is a manifestation of values and attitudes which is the true indicator of value systems.
- (7) Values are acquired through experience.
- (8) Values and value systems can and do change.
- (9) The acquisition of values and reordering of value systems is a continual process. It does not stop at any age or phase of life.
- (10) Organizations can influence change and develop positive values in their members.
- (11) There must be perceived social support for value change to be effected and maintained.
- (12) Members of professions and institutions tend, on the aggregate, to have similar values.
- (13) Organizational forms can reflect differences in values.
 - (a) Entreprenurial or occupational forms stress self-interest, material reward and profit motivation. They are appropriate for business and the open market place.

- (b) Corporate or institutional forms stress cohesion, service, ceremony, common goals and values. They are appropriate for group cohesion in hostile environments and are essential for an effective military force.
- (14) Societal value norms exist and change over time.
- (15) The values of individuals in a given profession determine the ethics of that profession.
- (16) The Army is endeavoring to incorporate knowledge of values into leadership doctrine and human resource development programs at all levels.

CHAPTER III

METHOD

This is in essence an evaluation research project using a quasi-experimental design. Babbie (1979) states, "Quasi-experiments are primarily distinguished from 'true' experiments by the lack of random assignment of subjects to an experimental and a control group. In evaluation research, it is often impossible to achieve such an assignment of subjects" (p. 299). A pre-test post-test administration of a survey instrument was done to gather the primary data. The subjects were soldiers in training companies and the stimulus was the current training program. The administration of the survey instrument was the only disruption of the normal training program. There was no change in the program or manipulation of the normal routine. The data was gathered during the July-October 1982 time frame.

Subjects

The subjects of the study were male soldiers attending Infantry Initial Entry Training (IET) conducted under the One Station Unit Training Program (OSUT) at Fort Benning, Georgia. One training company, Company C, 7th Battalion, 1st Infantry Training Brigade (C-7-1), was selected as the experimental group. Two other companies, Company A, 1st Battalion, 1st ITB (A-1-1), and Company B, 5th Battalion, 1st ITB (B-5-1), were selected as post-test only control groups.

The experimental group, C-7-1, n of 172 was administered a pre-test at the time of initial fill and prior to any training on 3 August 1982. Through normal attrition, such as injury, recycle, discharge or training failure combined with fewer recycles in and additions, the unit strength was reduced. The post-test was administered on 25 October 1982 to the graduating soldiers, n of 154.

Control group 1 was A-1-1 and began the same training one week earlier than the experimental group with 206 trainees. They were administered a post-test only on 11 October 1982, n of 188 prior to graduation. This was done mainly to control for the effects of exposure to the instrument during pre-testing. The stimulus, relative time frame and demographic composition remain essentially the same as for C-7-1.

A third company, B-5-1, served as control group 2. They had completed training and were graduating on 29 July 1982 while men that would be assigned to the other two companies were enroute or just arriving at Fort Benning. A post-test only, n of 100, was administered on 28 July 1982. This was done merely for general comparison with the C-7-1 pre-test data. It served to provide experience in processing the data on the computer, offer a somewhat different demographic composition and to identify changes likely to be shown in the other two groups.

Stimuli

The real life experience that served as the stimuli for this evaluation research was the Infantry OSUT program. This entry level training is required of all new soldiers who have enlisted to become infantrymen and is conducted only at Fort Benning, Georgia.

The Program of Instruction is the same regardless of the company

conducting the training. It consists of over 660 hours of specific and prescribed training designed to develop entry level proficiency in nearly 200 tasks. Of that number 65% are taught by the Infantry Training Group, an organization of specialists and instructors whose sole duty is to conduct OSUT training in their areas of expertise. The remaining 35% are taught by the individual training companies following rigid lesson plans and using standard training resources. Frequent inspections are conducted by a higher headquarters to insure compliance with established plans.

The vast majority of the time is spent following the standard program. During the remaining hours the soldiers activities are highly structured by the unit in accordance with regulations, standardized procedures and traditional practices. Within those limiting constraints, the individual training companies do vary somewhat depending upon the units' leadership. There are very few unsupervised hours during the 13 week program.

In a paper presented to the International Communication Association, Elsea (1979) explained that any organization's effort to prepare recruits for service in that organization could be viewed in terms of the communicative strategies employed. He conceptualized VanMaanens (1978) strategies into seven dimensions. The following is a description of the OSUT training program using those dimensions.

FORMAL vs. INFORMAL

The training is segregated from the everyday work setting and is formal. It limits contact to established organization members and pre-

pares recruits for a new status. The program is conducted at a training center and is not on the job training at an operational unit.

INDIVIDUAL vs. COLLECTIVE

The participants are placed in groups for training. Although there is much individual attention and coaching, it is a collective strategy. Teamwork is emphasized.

SEQUENTIAL vs. NON-SEQUENTIAL

The program is sequential. There are three distinct phases. The transition takes place sequentially as standards of performance increase from one phase to the next. Mastery of the initial material is needed for progression to subsequent material and to build team skills upon individual tasks.

FIXED vs. CONTEST

In this dimension, the program reflects a combination of both strategies. It is fixed in that there is a known, established timetable for all participants making satisfactory progress. It is also contest because maximum performance is stressed at each opportunity. Recruits are separated by awarding privileges and providing recognition to top performers. Unsatisfactory or even marginal performers lose privileges or undergo remedial training during free time. Minimum standards must be met to stay within the fixed timetable but maximum performance for each task is emphasized.

SERIAL vs. DISJUNCTIVE

Experienced organization members have contact with the recruits and support organizational stability, hence it is serial. There is little opportunity for recruits to form their own standards of performance as minimum levels are prescribed and enforced.

INVESTITURE vs. DIVESTITURE

Once again, there is a combination. Investiture strategies reinforce existing identity and tolerate, if not encourage, differences. Divestiture strategies stress the achievement of similar identities and group solidarity. The program endeavors to improve each individual's self image and reinforce his importance as an individual to the organization in consonance with the former strategy. In the latter, group cohesion, loyalty to the unit and esprit de corps receive considerable emphasis. Individual identities that reflect the norms of the organization are reinforced while those disruptive to the organization are suppressed.

Instrument

A modified Rokeach Value Survey was the instrument employed to gather the data. (See Appendix C) As published, it is a two-part instrument alphabetically listing 18 terminal and 18 instrumental values to be rank ordered according to the importance of the values as guiding principles to the respondent. It is widely used and has been highly regarded in a variety of studies. In a similar application, Vaughn (1975) finds it to be an effective measure of value changes that does not generate undue sensitization or test effects, and is appropriate for limited "program

impact" assessment through pre-test post-test administration.

An approved modification of the instrument was made by ARI with the addition of the instrumental value ACTIVE and the terminal value PHYSICAL FITNESS. The lists are then rated rather than rank ordered. This study replicates the ARI modification but offers the respondent a 5 point rating scale, instead of a 7 point scale. The selection of available responses was:

- A Not at all important in my life
- B Somewhat important in my life
- C Moderately important in my life
- D Highly important in my life
- E One of the most important values in my life

Five demographic items of information were requested. There were four multiple choice questions regarding component, rank, marital status, and education at the conclusion of the survey. Exact age was indicated in a separate block of the answer sheet heading.

All surveys were administered in a classroom environment with the majority of each group present. Most of the remaining soldiers unable to be present because of duty requirements were administered the survey with 24 hours in the same environment. Written administrative instructions and a text of verbatim verbal instructions were provided to the control and experimental group company commanders (See Appendix D). The company commanders of the Experimental Group (C-7-1) and Control Group 1 (A-1-1) were briefed in detail on the procedure and furnished with the administrative instruction packets, viewgraph transparencies, instruments, answer sheets and mailing envelopes during the July field study. Control Group 2 (B-5-1) was administered the instrument by this researcher, using the same prepared text and material, during the July field study. This

was to insure that the guidance was clear and prevent any inter-coder variance. The response sheets were not processed at Fort Benning in any way, but were gathered by the company commanders, packaged in the cushioned document envelopes and mailed to the University of Wisconsin-Stevens Point for analysis.

Assumptions

The fundamental assumption involved in the study is that the concepts listed in the instrument depict the values held by the respondents and that the survey will actually reflect the changes in the norms of the groups. The soldiers themselves appear to be a representative sample for these reasons:

1. They are OSUT units with a traditional mix of trainees who were assigned to those groups at a reception station as opposed to special groupings of trainees from one geographic region or on orders to one specific unit.
2. Training scores and statistics for units in cycle during the summer time frame have historically been closer to the overall averages and norms than at any other time.
3. The units will have had in excess of 150 soldiers assigned. Their cadre was typical of any other training company in terms of strength, experience, record of performance and background.

The stimulus, namely the Infantry OSUT experience, is presumed to be essentially the same for both units and representative of the norm. There was no satilization of reserve component drill sergeants on summer training, no major personnel turbulence, no breaks in training such as Christmas leave and no major disruptions like Annual General Inspection or relocation to different barracks.

The single most critical factor in determining the performance and effectiveness of an organization, all other factors being relatively equal, is leadership. It is difficult to quantitatively isolate this

factor; however, it is not ignored in this study. The cadre leadership of the units provide the role models for the trainees. It is assumed that the leadership of the companies is different, but essentially equal. In an attempt to insure that this is true, the unit cadre was also administered the survey instrument. This was only done so as to reveal any major differences in the value systems of the training company cadre. It was not an objective of the study to compare cadre with trainee values. It was assumed that the cadre value systems would be similar to those of the career soldiers as shown in the 1981 ARI study.

Analysis Procedure

The subjects indicated their responses to the value survey and demographic items directly on a standard University of Wisconsin machine scored answer sheet, using the #2 lead pencils provided. When the sheets were returned for analysis they were first visually inspected for incomplete erasures, completely darkened responses, proper placement of age and student roster number and then corrected. Missing demographic items were completed using annotated company rosters to obtain needed information. Any missing value ratings were left blank. As each sheet was inspected it was coded to reflect the respondents unit and test. The sheets were then processed on an NCS Trans-Optic Scanner to read the responses for transfer of the data to a disk file of the Burroughs B-6900 computer.

Once on the disk file, the data was processed for analysis using the Statistical Package for Social Sciences (SPSS). A variety of statistical procedures were used to examine the data. Initially, frequency distribution tables were printed to provide the mean and standard deviation for each groups value ratings. From this, the lists of terminal

and instrumental values were rank ordered. Differences in the means between the groups were examined with a t-test and two tailed probability was calculated to indicate statistically significant relationships. Finally, cross tabulation matrices were printed to compare value ratings with each demographic factor and provide correlation using Pearson's Product Moment. Correlation was shown by Pearson's r, and Chi-square and levels of significance were computed.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter presents the results of an attempt to determine the value system likely to be held by soldiers upon completion of Infantry OSUT. It was possible to generate a great volume of information with relative ease by processing the survey data on the computer. Pertinent information has been extracted and is depicted in the tables contained within this chapter.

Soldiers examined collectively as units, not singly as individuals are the focus of the study. Individual differences or relationships are not really of concern unless they indicate some recurring deviation or common significance with any of the demographic factors. The presentation of the results is both objective and subjective. Tables and objective observations regarding the data are provided from a researcher's perspective. The subjective evaluation from an Infantry Officer's perspective is an equally legitimate contribution. As was presented in Chapter III, "Review of the Literature", different understandings and conclusions may be reached by readers of the same material because of differences in their value systems. Additionally, statistical manipulation of the raw data might lead some researchers to different conclusions or perhaps provide greater support for those conclusions indicated by the data as it is presented here. For example, by combining responses

during analysis and thus changing cell frequencies it is possible to obtain different relationships and levels of significance. The findings offered here are straightforward, were conscientiously prepared, and are intended as a factual description of the program's effect on young men who have become Infantrymen.

Frequencies

The first data presented are the cell frequencies of value rating responses by company. Tables 1 to 8 provide the number and percent of each values rating. They show that there is a low cell frequency for the bottom two responses of not important and somewhat important. The vast number fall in the top two responses of highly important and most important. Only the top two cells drew a majority of 50% or more of the total responses. In general, the terminal values have more of the majority ratings than do the instrumental values. The top two response cells for instrumental values have more items with less than 25% of the total response. This indicates greater feelings of intensity for the terminal values. Since those values reflect ultimate goals in life, a greater intensity of feeling is plausible.

T A B L E S 1 - 8

TABLE 1

FREQUENCY OF TERMINAL VALUE RATINGS FOR EXPERIMENTAL GROUP (C-7) PRE-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
A Comfortable Life	(4)	2.3	(12)	7.0	(39)	22.7	(54)	31.4	(63)	36.6
An Exciting Life	(4)	2.3	(15)	8.7	(27)	15.7	(71)	41.3	(55)	32.0
A Sense of Accomplishment	(5)	2.9	(12)	7.0	(18)	10.5	(68)	39.5	(69)	40.1
A World at Peace	(5)	2.9	(14)	8.2	(37)	21.6	(46)	26.9	(69)	40.4
A World of Beauty	(7)	4.1	(17)	10.0	(53)	31.2	(50)	29.4	(43)	25.3
Equality	(11)	6.4	(15)	8.8	(38)	22.0	(64)	37.4	(43)	25.1
Family Security	(2)	1.2	(2)	1.2	(7)	4.1	(35)	20.3	(126)	73.3
Freedom	(3)	1.7	(3)	1.7	(8)	4.7	(42)	24.4	(116)	67.4
Happiness	(1)	0.6	(7)	4.1	(15)	8.8	(59)	34.7	(88)	51.8
Inner Harmony	(5)	2.9	(15)	8.8	(48)	28.1	(63)	36.8	(40)	23.4
Mature Love	(0)	0.0	(7)	4.1	(26)	15.2	(54)	31.6	(84)	49.1
National Security	(4)	2.3	(10)	5.8	(25)	14.5	(69)	40.1	(64)	37.2
Physical Fitness	(5)	2.9	(8)	4.7	(27)	15.9	(69)	40.6	(61)	35.9
Pleasure	(7)	4.1	(10)	5.9	(45)	26.6	(56)	33.1	(51)	30.2
Salvation	(11)	6.4	(27)	15.8	(35)	20.5	(34)	19.9	(64)	37.4
Self-Respect	(3)	1.7	(2)	1.2	(20)	11.6	(60)	34.9	(87)	50.6
Social Recognition	(4)	2.3	(19)	11.1	(44)	25.7	(60)	35.1	(44)	25.7
True Friendship	(5)	2.9	(3)	1.7	(16)	9.3	(73)	42.4	(75)	43.6
Wisdom	(1)	0.6	(8)	4.7	(37)	21.6	(71)	41.5	(54)	31.6

TABLE 2

FREQUENCY OF INSTRUMENTAL VALUE RATINGS FOR EXPERIMENTAL GROUP (C-7) PRE-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
Active	(5)	3.0	(10)	5.9	(48)	28.4	(70)	41.4	(36)	21.3
Ambitious	(5)	2.9	(7)	4.1	(33)	19.4	(81)	47.6	(44)	25.9
Broadminded	(6)	3.5	(6)	3.5	(55)	32.4	(62)	36.5	(41)	24.1
Capable	(1)	0.6	(7)	4.1	(34)	20.1	(83)	49.1	(44)	26.0
Cheerful	(5)	2.9	(13)	7.6	(58)	33.9	(58)	33.9	(37)	21.6
Clean	(4)	2.4	(7)	4.1	(27)	15.9	(63)	37.1	(69)	40.6
Courageous	(3)	1.8	(2)	1.2	(23)	13.5	(66)	38.8	(76)	44.7
Forgiving	(6)	3.5	(14)	8.2	(39)	22.9	(67)	39.4	(44)	25.9
Helpful	(3)	1.8	(15)	8.8	(48)	28.1	(73)	42.7	(32)	18.7
Honest	(5)	2.9	(3)	1.8	(22)	12.9	(55)	32.4	(85)	50.0
Imaginative	(5)	2.9	(16)	9.4	(56)	32.7	(61)	35.7	(33)	19.3
Independent	(2)	1.2	(7)	4.1	(28)	16.4	(66)	38.6	(68)	39.8
Intellectual	(3)	1.7	(13)	7.6	(49)	28.5	(71)	41.3	(36)	20.9
Logical	(2)	1.2	(13)	7.6	(54)	31.4	(69)	40.1	(34)	19.8
Loving	(4)	2.3	(9)	5.3	(17)	9.9	(59)	34.5	(82)	48.0
Obedient	(5)	2.9	(6)	3.5	(25)	14.6	(91)	53.2	(44)	25.7
Polite	(3)	1.8	(10)	5.9	(30)	17.8	(66)	39.1	(60)	35.5
Responsible	(2)	1.2	(4)	2.4	(21)	12.4	(77)	45.3	(66)	38.8
Self-Controlled	(5)	2.9	(7)	4.1	(23)	13.5	(79)	46.2	(57)	33.3

TABLE 3

FREQUENCY OF TERMINAL VALUE RATINGS FOR EXPERIMENTAL GROUP (C-7) POST-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
A Comfortable Life	(3)	1.9	(14)	9.1	(28)	18.2	(77)	50.0	(32)	20.8
An Exciting Life	(2)	1.3	(4)	2.6	(34)	22.1	(77)	50.0	(37)	24.0
A Sense of Accomplishment	(2)	1.3	(7)	4.5	(24)	15.6	(62)	40.3	(59)	38.3
A World at Peace	(4)	2.6	(8)	5.2	(31)	20.1	(43)	27.9	(68)	44.2
A World of Beauty	(3)	2.0	(11)	7.2	(48)	31.4	(57)	37.3	(34)	22.0
Equality	(2)	1.3	(12)	7.8	(45)	29.2	(48)	31.2	(47)	30.5
Family Security	(1)	0.6	(6)	3.9	(6)	3.9	(36)	23.4	(105)	68.2
Freedom	(1)	0.6	(1)	0.6	(7)	4.5	(38)	24.7	(107)	69.5
Happiness	(2)	1.3	(2)	1.3	(19)	12.3	(66)	42.9	(65)	42.2
Inner Harmony	(3)	1.9	(11)	7.1	(35)	22.7	(65)	42.2	(40)	26.0
Mature Love	(2)	1.3	(6)	3.9	(19)	12.3	(68)	44.2	(59)	38.3
National Security	(4)	2.6	(2)	1.3	(17)	11.1	(64)	41.8	(66)	43.1
Physical Fitness	(0)	0.0	(4)	2.6	(17)	11.0	(66)	42.9	(67)	43.5
Pleasure	(4)	2.6	(8)	5.2	(39)	25.3	(72)	46.8	(31)	20.1
Salvation	(5)	3.2	(16)	10.4	(30)	19.5	(40)	26.0	(63)	40.9
Self-Respect	(1)	0.6	(2)	1.3	(12)	7.8	(59)	38.3	(80)	51.9
Social Recognition	(3)	1.9	(12)	7.8	(35)	22.7	(73)	47.4	(31)	20.1
True Friendship	(1)	0.6	(3)	1.9	(25)	16.2	(69)	44.8	(56)	36.4
Wisdom	(1)	0.6	(5)	3.2	(33)	21.4	(68)	44.2	(47)	30.5

TABLE 4

FREQUENCY OF INSTRUMENTAL VALUE RATINGS FOR EXPERIMENTAL GROUP (C-7) POST-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
Active	(1)	0.6	(8)	5.2	(45)	29.2	(71)	46.1	(29)	18.8
Ambitious	(1)	0.6	(8)	5.2	(29)	18.8	(77)	50.0	(39)	25.3
Broadminded	(4)	2.6	(2)	1.3	(52)	33.8	(65)	42.2	(31)	20.1
Capable	(1)	0.6	(5)	3.2	(35)	22.7	(76)	49.4	(37)	24.0
Cheerful	(2)	1.3	(8)	5.2	(56)	36.4	(57)	37.0	(31)	20.1
Clean	(1)	0.6	(6)	3.9	(26)	16.9	(64)	41.6	(57)	37.0
Courageous	(1)	0.6	(2)	1.3	(13)	8.4	(59)	38.3	(79)	51.3
Forgiving	(2)	1.3	(3)	1.9	(41)	26.6	(72)	46.8	(36)	23.4
Helpful	(2)	1.3	(5)	3.2	(54)	35.1	(64)	41.6	(29)	18.8
Honest	(1)	0.7	(2)	1.3	(10)	6.5	(79)	51.6	(61)	39.9
Imaginative	(2)	1.3	(7)	4.5	(61)	39.6	(55)	35.7	(29)	18.8
Independent	(1)	0.6	(2)	1.3	(16)	10.4	(70)	45.5	(65)	42.2
Intellectual	(3)	1.9	(2)	1.3	(42)	27.3	(71)	46.1	(36)	23.4
Logical	(3)	1.9	(4)	2.6	(48)	31.2	(75)	48.7	(24)	15.6
Loving	(1)	0.6	(3)	1.9	(25)	16.2	(54)	35.1	(71)	46.1
Obedient	(3)	1.9	(2)	1.3	(40)	26.0	(61)	39.6	(48)	31.2
Polite	(3)	1.9	(5)	3.2	(27)	17.5	(72)	46.8	(47)	30.5
Responsible	(1)	0.6	(3)	1.9	(15)	9.7	(58)	37.7	(77)	50.0
Self-Controlled	(0)	0.0	(3)	1.9	(22)	14.3	(65)	42.2	(64)	41.6

TABLE 5

FREQUENCY OF TERMINAL VALUE RATINGS FOR CONTROL GROUP 1 (A-1) POST-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
A Comfortable Life	(7)	3.7	(12)	6.4	(43)	22.9	(73)	38.8	(53)	28.2
An Exciting Life	(2)	1.1	(11)	5.9	(41)	21.8	(90)	47.9	(44)	23.4
A Sense of Accomplishment	(1)	0.5	(5)	2.7	(27)	14.4	(81)	43.1	(74)	39.4
A World at Peace	(5)	2.7	(8)	4.3	(23)	12.4	(50)	26.9	(100)	53.8
A World of Beauty	(3)	1.6	(15)	8.0	(54)	28.7	(69)	36.7	(47)	25.0
Equality	(3)	1.6	(6)	3.2	(40)	21.3	(71)	37.8	(68)	36.2
Family Security	(4)	2.1	(1)	0.5	(5)	2.7	(41)	21.8	(137)	72.9
Freedom	(0)	0.0	(6)	3.2	(10)	5.3	(49)	26.1	(123)	65.4
Happiness	(1)	0.5	(2)	1.1	(28)	15.0	(70)	37.4	(86)	46.0
Inner Harmony	(5)	2.7	(14)	7.4	(48)	25.5	(70)	37.2	(51)	27.1
Mature Love	(0)	0.0	(5)	2.7	(23)	12.3	(78)	41.7	(81)	43.3
National Security	(3)	1.6	(3)	1.6	(29)	15.4	(66)	35.1	(87)	46.3
Physical Fitness	(3)	1.6	(4)	2.1	(29)	15.4	(78)	41.5	(74)	39.4
Pleasure	(3)	1.6	(12)	6.4	(39)	20.7	(73)	38.8	(61)	32.4
Salvation	(5)	2.7	(18)	9.6	(38)	20.2	(44)	23.4	(83)	44.1
Self-Respect	(2)	1.1	(3)	1.6	(24)	12.8	(63)	33.7	(95)	50.8
Social Recognition	(4)	2.1	(18)	9.6	(40)	21.4	(77)	41.2	(48)	25.7
True Friendship	(2)	1.1	(4)	2.1	(20)	10.6	(79)	42.0	(83)	44.1
Wisdom	(5)	2.7	(9)	4.8	(25)	13.4	(78)	41.9	(69)	37.1

TABLE 6
FREQUENCY OF INSTRUMENTAL VALUE RATINGS FOR CONTROL GROUP 1 (A-1) POST-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
Active	(2)	1.1	(12)	6.5	(44)	23.7	(79)	42.5	(49)	26.3
Ambitious	(5)	2.7	(8)	4.3	(30)	16.0	(84)	44.7	(61)	32.4
Broadminded	(2)	1.1	(10)	5.3	(59)	31.6	(81)	43.3	(35)	18.7
Capable	(3)	1.6	(10)	5.3	(38)	20.3	(88)	47.1	(48)	25.7
Cheerful	(0)	0.0	(11)	5.9	(51)	27.1	(83)	44.1	(43)	22.9
Clean	(1)	0.5	(7)	3.7	(27)	14.4	(62)	33.0	(91)	48.4
Courageous	(1)	0.5	(6)	3.2	(22)	11.7	(70)	37.2	(89)	47.3
Forgiving	(5)	2.7	(2)	1.1	(45)	23.9	(92)	48.9	(44)	23.4
Helpful	(2)	1.1	(10)	5.3	(51)	27.3	(80)	42.8	(44)	23.5
Honest	(1)	0.5	(4)	2.2	(31)	16.8	(60)	32.4	(89)	48.1
Imaginative	(3)	1.6	(13)	7.0	(49)	26.2	(79)	42.2	(43)	23.0
Independent	(2)	1.1	(9)	4.8	(30)	16.0	(76)	40.6	(70)	37.4
Intellectual	(3)	1.6	(7)	3.7	(55)	29.3	(67)	35.6	(56)	29.8
Logical	(1)	0.5	(11)	6.0	(54)	29.3	(78)	42.4	(40)	21.7
Loving	(2)	1.1	(4)	2.1	(21)	11.2	(60)	31.9	(101)	53.7
Obedient	(2)	1.1	(11)	5.9	(24)	12.8	(87)	46.5	(63)	33.7
Polite	(1)	0.5	(10)	5.3	(33)	17.6	(76)	40.4	(68)	36.2
Responsible	(2)	1.1	(3)	1.6	(16)	8.5	(86)	45.7	(81)	43.1
Self-Controlled	(3)	1.6	(4)	2.1	(26)	13.9	(73)	39.0	(81)	43.3

TABLE 7
FREQUENCY OF TERMINAL VALUE RATINGS FOR CONTROL GROUP 2 (B-5) POST-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
A Comfortable Life	(3)	3.0	(15)	15.0	(30)	30.0	(32)	32.0	(20)	20.0
An Exciting Life	(2)	2.0	(9)	9.0	(24)	24.0	(38)	38.0	(27)	27.0
A Sense of Accomplishment	(4)	4.0	(13)	13.0	(17)	17.0	(29)	29.0	(37)	37.0
A World at Peace	(5)	5.0	(11)	11.0	(25)	25.0	(21)	21.0	(38)	38.0
A World of Beauty	(3)	3.0	(28)	28.0	(22)	22.0	(30)	30.0	(17)	17.0
Equality	(5)	5.0	(17)	17.0	(34)	34.0	(23)	23.0	(21)	21.0
Family Security	(3)	3.0	(3)	3.0	(8)	8.0	(25)	25.0	(61)	61.0
Freedom	(3)	3.0	(6)	6.0	(8)	8.0	(25)	25.0	(58)	58.0
Happiness	(2)	2.0	(7)	7.0	(16)	16.0	(41)	41.0	(34)	34.0
Inner Harmony	(4)	4.0	(19)	19.0	(24)	24.0	(32)	32.0	(21)	21.0
Mature Love	(2)	2.0	(6)	6.0	(16)	16.0	(27)	27.0	(49)	49.0
National Security	(4)	4.0	(8)	8.0	(26)	26.0	(30)	30.0	(32)	32.0
Physical Fitness	(3)	3.0	(7)	7.0	(19)	19.0	(41)	41.0	(30)	30.0
Pleasure	(4)	4.0	(9)	9.0	(26)	26.0	(44)	44.0	(17)	17.0
Salvation	(10)	10.0	(7)	7.0	(22)	22.0	(23)	23.0	(38)	38.0
Self-Respect	(2)	2.0	(3)	3.0	(16)	16.0	(42)	42.0	(37)	37.0
Social Recognition	(4)	4.0	(17)	17.0	(40)	40.0	(28)	28.0	(11)	11.0
True Friendship	(3)	3.0	(10)	10.0	(17)	17.0	(40)	40.0	(30)	30.0
Wisdom	(4)	4.0	(9)	9.0	(21)	21.0	(38)	38.0	(28)	28.0

TABLE 8
FREQUENCY OF INSTRUMENTAL VALUE RATINGS FOR CONTROL GROUP 2 (B-5) POST-TEST

	NOT IMPORTANT		SOMEWHAT IMPORTANT		MODERATELY IMPORTANT		HIGHLY IMPORTANT		MOST IMPORTANT	
	n	%	n	%	n	%	n	%	n	%
Active	(1)	1.0	(13)	13.0	(28)	28.0	(39)	39.0	(19)	19.0
Ambitious	(0)	0.0	(8)	8.0	(24)	24.0	(39)	39.0	(29)	29.0
Broadminded	(2)	2.0	(13)	13.0	(28)	28.0	(38)	38.0	(19)	19.0
Capable	(1)	1.0	(9)	9.1	(23)	23.2	(40)	40.4	(26)	26.3
Cheerful	(6)	6.0	(7)	7.0	(39)	39.0	(34)	34.0	(14)	14.0
Clean	(2)	2.0	(13)	13.0	(21)	21.0	(32)	32.0	(32)	32.0
Courageous	(2)	2.0	(10)	10.0	(17)	17.0	(35)	35.0	(36)	36.0
Forgiving	(3)	3.0	(18)	18.0	(22)	22.0	(37)	37.0	(20)	20.0
Helpful	(2)	2.0	(12)	12.0	(32)	32.0	(38)	38.0	(16)	16.0
Honest	(2)	2.0	(6)	6.1	(20)	20.2	(38)	38.4	(33)	33.3
Imaginative	(3)	3.0	(16)	16.2	(27)	27.3	(38)	38.4	(15)	15.2
Independent	(4)	4.0	(9)	9.0	(15)	15.0	(34)	34.0	(38)	38.0
Intellectual	(5)	5.0	(10)	10.0	(25)	25.0	(42)	42.0	(18)	18.0
Logical	(2)	2.0	(15)	15.0	(28)	28.0	(39)	39.0	(16)	16.0
Loving	(2)	2.0	(3)	3.0	(16)	16.0	(30)	30.0	(49)	49.0
Obedient	(2)	2.0	(9)	9.0	(24)	24.0	(37)	37.0	(28)	28.0
Polite	(2)	2.0	(10)	10.1	(24)	24.2	(40)	40.4	(23)	23.2
Responsible	(1)	1.0	(8)	8.0	(10)	10.0	(43)	43.0	(38)	38.0
Self-Controlled	(4)	4.0	(13)	13.1	(16)	16.2	(26)	26.3	(40)	40.4

Value Rankings

The mean, standard deviation, and composite rank of value ratings by research group appear in Tables 9 to 16. Also provided are t-test figures and significance resulting from the comparison of one group to another. A side by side listing of composite ranks only is shown in Tables 17 and 18.

Terminal values show greater similarity terms of post-test ranks across all groups than do instrumental values. A larger number of terminal values show pronounced changes in rank order from pre-test to post-test in the experimental group. No real significance should be placed on changes of one or sometimes two positions in the rank order. Such minor shifts are likely to result from the larger movement of those values making major changes in rank order. The two top and two bottom ranked terminal values for all post-tests are Family Security, Freedom, and Social Recognition, A World of Beauty, respectively.

Major terminal value rank order changes made by the experimental group are seen by the increase in importance of Physical Fitness by 5 positions, Salvation by 4 positions, Equality by 3 positions and National Security by 2 positions. Major decreases in rank order were Comfortable Life by 4 positions, Pleasure by 3 positions and Social Recognition by 3 positions. All of these rank order changes are reflective of a movement towards closer alliance with the desired professional traits.

The increased importance of Physical Fitness is to be expected. Considerable effort is directed towards improving the soldiers' physical condition and developing his ability to function effectively under the rigors of battlefield conditions. After growing accustomed to physical

aches and discomfort, the men are positive towards physical training. They are able to observe their progress almost daily in terms of increasing numbers of exercises they are able to perform, the length and speed of endurance marches and distance runs. One of the most important evaluations before graduation is the Advanced Physical Readiness Test (APRT). Units strive to out perform one another and the soldiers are normally highly motivated. It is unusual that A-1-1 ranked the value Physical Fitness lower than the other units because they performed exceptionally well on the APRT, scoring an average of 273 points out of a possible 300.

The change in Salvation is somewhat surprising although quite understandable. An orientation visit to the chapel and a briefing by the chaplain are part of the training program. The Brigade Commanders Orientation, a highly motivational presentation, always includes reference to a combat experience combined with the observation that "there is no such thing as an atheist in a foxhole." Attendance at religious activities of the soldiers' denomination is strongly encouraged. This continual support of a soldier's right to practice his religious beliefs and attend worship has obviously made a difference in many men.

The decrease in ranking for terminal values, reflective of individual gain and self-interest, is supportive of the ethic of selfless service. A Comfortable Life drops 4 positions and Happiness drops 2 positions for the experimental group. The emphasis on teamwork and enjoying success as a unit for mission accomplishment support the decrease in importance of Social Recognition.

The value Equality is ranked relatively low, however, it increases 3 positions for the experimental group. This would tend to support the contention that an important element of group cohesion, or credibility of a leader, is the aspect of shared hardship and equal vulnerability to the hazards of the environment. While there exist clear increases of privilege and responsibility that go with increased rank, a certain element of Equality is expected.

The instrumental values do not show marked changes from pre-test to post-test in the experimental group. A change of some concern is the shift downward by Honest 2 positions. It does remain at the top, third in the rank order behind Courageous and Responsible and should not be particularly alarming. Responsible is rank ordered #2 consistently in all post-tests, having moved up 2 positions from the pre-test.

The changes in rank order were based upon the changes in the mean of each value rating. When the individual changes from pre-test to post-test for the experimental group were administered the t-test, only two were found to be statistically significant at the .05 level. These were the increases in importance of the terminal value Physical Fitness and the instrumental value Self-Controlled. Selected values were then combined into 4 professionally relevant value clusters. The clusters and their component values were:

- . DISCIPLINE - Independent, Responsible, Self-Controlled
- . SOLDIERLY IMAGE - National Security, Physical Fitness
- . SELF-INTEREST - Comfort, Happiness
- . HUMAN RIGHTS - Equality, Salvation, Self-Respect

When those select values were resubmitted to analysis collectively as value clusters, the t-tests indicated improved levels of statistical significance. The results of this procedure are shown in Table 19.

TABLE 9

COMPARISON OF PRE-TEST AND POST-TEST MEANS FOR EXPERIMENTAL GROUP (C-7) TERMINAL VALUES

	PRE-TEST			POST-TEST			t=
	\bar{x}	S.d.	Comp Rank	\bar{x}	S.d.	Comp Rank	
A Comfortable Life	3.93	1.041	(12)	3.78	0.943	(16)	-1.47
An Exciting Life	3.91	1.071	(13)	3.92	0.825	(12)	0.02
A Sense of Accomplishment	4.07	1.024	(7)	4.09	0.913	(9)	0.34
A World at Peace	3.93	1.102	(11)	4.05	1.043	(10)	0.98
A World of Beauty	3.61	1.194	(19)	3.70	0.959	(19)	1.00
Equality	3.66	1.138	(18)	3.81	1.000	(15)	1.41
Family Security	4.63	0.725	(1)	4.54	0.801	(2)	-1.11
Freedom	4.54	0.812	(2)	4.61	0.669	(1)	1.03
Happiness	4.32	0.840	(3)	4.23	0.815	(5)	-1.14
Inner Harmony	3.69	1.019	(16)	3.83	0.962	(14)	1.34
Mature Love	4.25	0.863	(5)	4.14	0.874	(7)	-1.10
National Security	4.04	0.981	(8)	4.21	0.888	(6)	1.57
Physical Fitness	4.01	0.988	(9)	4.27	0.761	(4)	2.43*
Pleasure	3.79	1.268	(14)	3.76	0.920	(17)	-0.04
Salvation	3.66	1.298	(17)	3.90	1.145	(13)	1.73
Self-Respect	4.31	0.855	(4)	4.39	0.745	(3)	0.98
Social Recognition	3.70	1.044	(15)	3.76	0.929	(18)	0.38
True Friendship	4.22	0.904	(6)	4.14	0.804	(8)	-0.95
Wisdom	3.98	0.881	(10)	4.00	0.844	(11)	0.32

Significant t indicated by asterisk* $p < .05$ ** $p < .01$

TABLE 10
COMPARISON OF PRE-TEST AND POST-TEST MEANS FOR EXPERIMENTAL GROUP (C-7) INSTRUMENTAL VALUES

	PRE-TEST			POST-TEST			t=
	\bar{x}	S.d.	Comp Rank	\bar{x}	S.d.	Comp Rank	
Active	3.72	0.963	(14)	3.77	0.836	(14)	0.52
Ambitious	3.89	0.936	(11)	3.94	0.842	(10)	0.54
Broadminded	3.74	0.981	(13)	3.76	0.879	(15)	0.62
Capable	3.95	0.826	(9)	3.92	0.809	(11)	-0.35
Cheerful	3.63	0.999	(18)	3.69	0.895	(18)	0.69
Clean	4.09	0.968	(6)	4.10	0.864	(7)	0.04
Courageous	4.23	0.859	(2)	4.38	0.751	(1)	1.85
Forgiving	3.75	1.041	(12)	3.89	0.829	(12)	1.31
Helpful	3.67	0.937	(17)	3.73	0.848	(17)	0.58
Honest	4.24	0.957	(1)	4.28	0.704	(3)	0.33
Imaginative	3.59	0.998	(19)	3.66	0.880	(19)	0.72
Independent	4.11	0.906	(5)	4.27	0.752	(4)	1.56
Intellectual	3.72	0.938	(15)	3.87	0.850	(13)	1.78
Logical	3.69	0.912	(16)	3.73	0.825	(16)	0.61
Loving	4.20	0.982	(3)	4.24	0.841	(5)	0.51
Obedient	3.95	0.900	(10)	3.96	0.896	(9)	0.13
Polite	4.00	0.967	(8)	4.00	0.889	(8)	0.19
Responsible	4.18	0.826	(4)	4.34	0.787	(2)	1.85
Self-Controlled	4.02	0.948	(7)	4.23	0.765	(6)	2.25*

Significant t indicated by asterisk

* $P < .05$
** $P < .01$

TABLE 11
COMPARISON OF POST-TEST MEANS FOR CONTROL GROUP 1 (A-1) AND EXPERIMENTAL GROUP (C-7) TERMINAL VALUES

	A-1			C-7			t=
	\bar{x}	S.d.	Comp Rank	\bar{x}	S.d.	Comp Rank	
A Comfortable Life	3.81	1.035	(16)	3.78	0.943	(16)	-0.45
An Exciting Life	3.86	0.877	(15)	3.92	0.825	(12)	0.41
A Sense of Accomplishment	4.18	0.814	(9)	4.09	0.913	(9)	-0.81
A World at Peace	4.24	1.010	(7)	4.05	1.043	(10)	-1.74
A World of Beauty	3.75	0.972	(19)	3.70	0.959	(19)	0.73
Equality	4.03	0.921	(12)	3.81	1.000	(15)	-2.15*
Family Security	4.62	0.760	(1)	4.54	0.801	(2)	-1.05
Freedom	4.53	0.741	(2)	4.61	0.669	(1)	1.14
Happiness	4.27	0.793	(4)	4.23	0.815	(5)	-0.53
Inner Harmony	3.78	1.012	(17)	3.83	0.962	(14)	0.43
Mature Love	4.25	0.775	(6)	4.14	0.874	(7)	-1.14
National Security	4.22	0.881	(8)	4.21	0.888	(6)	-0.44
Physical Fitness	4.14	0.871	(10)	4.27	0.761	(4)	1.20
Pleasure	3.94	0.966	(14)	3.76	0.920	(17)	-1.39
Salvation	3.96	1.128	(13)	3.90	1.145	(13)	-0.53
Self-Respect	4.31	0.837	(3)	4.39	0.745	(3)	0.82
Social Recognition	3.78	1.004	(18)	3.76	0.929	(18)	-0.54
True Friendship	4.26	0.815	(5)	4.14	0.804	(8)	-1.50
Wisdom	4.05	0.971	(11)	4.00	0.844	(11)	-0.42

Significant t indicated by asterisk

* $p < .05$

** $p < .01$

TABLE 12

COMPARISON OF POST-TEST MEANS FOR CONTROL GROUP 1 (A-1) AND EXPERIMENTAL GROUP (C-7) INSTRUMENTAL VALUES

	A-1			C-7			t=
	\bar{x}	S.d.	Comp Rank	\bar{x}	S.d.	Comp Rank	
Active	3.86	0.917	(14)	3.77	0.836	(14)	-0.97
Ambitious	4.00	0.948	(10)	3.94	0.842	(10)	-0.60
Broadminded	3.73	0.863	(19)	3.76	0.879	(15)	0.74
Capable	3.89	0.901	(11)	3.92	0.809	(11)	0.08
Cheerful	3.84	0.844	(15)	3.69	0.895	(18)	-1.24
Clean	4.25	0.875	(5)	4.10	0.864	(7)	-1.52
Courageous	4.27	0.833	(3)	4.38	0.751	(1)	1.41
Forgiving	3.89	0.865	(12)	3.89	0.829	(12)	0.09
Helpful	3.82	0.890	(16)	3.73	0.848	(17)	-1.01
Honest	4.25	0.850	(4)	4.28	0.704	(3)	0.18
Imaginative	3.78	0.933	(18)	3.66	0.880	(19)	-1.32
Independent	4.08	0.906	(7)	4.27	0.752	(4)	1.64
Intellectual	3.88	0.935	(13)	3.87	0.850	(13)	-0.05
Logical	3.78	0.871	(17)	3.73	0.425	(16)	-0.57
Loving	4.35	0.843	(1)	4.24	0.841	(5)	-0.96
Obedient	4.05	0.893	(9)	3.96	0.896	(9)	-1.01
Polite	4.06	0.893	(8)	4.00	0.889	(8)	-0.41
Responsible	4.28	0.774	(2)	4.34	0.787	(2)	0.74
Self-Controlled	4.20	0.875	(6)	4.23	0.765	(6)	0.48

Significant t indicated by asterisk* $p < .05$ ** $p < .01$

COMPARISON OF POST-TEST MEANS FOR EXPERIMENTAL GROUP (C-7) AND CONTROL GROUP 2 (B-5) TERMINAL VALUES

Significant t indicated by asterisk

p < .01

TABLE 14

COMPARISON OF POST-TEST MEANS FOR EXPERIMENTAL GROUP (C-7) AND CONTROL GROUP 2 (B-5) INSTRUMENTAL VALUES

	B-5			C-7		
	\bar{x}	S.d.	Comp Rank	\bar{x}	S.d.	Comp Rank
Active	3.62	0.972	(12)	3.77	0.836	(14)
Ambitious	3.89	0.920	(6)	3.94	0.842	(10)
Broadminded	3.59	1.006	(13)	3.76	0.879	(15)
Capable	3.81	0.962	(8)	3.92	0.809	(11)
Cheerful	3.43	1.018	(19)	3.69	0.895	(18)
Clean	3.79	1.094	(10)	4.10	0.864	(7)
Courageous	3.93	1.057	(5)	4.38	0.751	(1)
Forgiving	3.53	1.096	(16)	3.89	0.829	(12)
Helpful	3.54	0.968	(15)	3.73	0.848	(17)
Honest	3.94	0.983	(3)	4.26	0.704	(3)
Imaginative	3.46	1.003	(18)	3.66	0.880	(19)
Independent	3.93	1.121	(4)	4.27	0.752	(4)
Intellectual	3.58	1.056	(14)	3.87	0.850	(13)
Logical	3.52	1.000	(17)	3.73	0.825	(16)
Loving	4.21	0.957	(1)	4.24	0.841	(5)
Obedient	3.80	1.015	(1)	3.96	0.896	(9)
Polite	3.72	0.998	(11)	4.00	0.889	(8)
Responsible	4.09	0.944	(2)	4.34	0.787	(2)
Self-Controlled	3.85	1.204	(7)	4.23	0.765	(6)

Significant t indicated by asterisk* $p < .05$ ** $p < .01$

TABLE 15
COMPARISON OF POST-TEST MEANS FOR CONTROL GROUP 1 (A-1) AND CONTROL GROUP 2 (B-5) TERMINAL VALUES

	B-5			A-1		
	\bar{x}	S.d.	Comp Rank	\bar{x}	S.d.	Comp Rank
A Comfortable Life	3.51	1.068	(15)	3.81	1.035	(16)
An Exciting Life	3.79	1.008	(9)	3.86	0.877	(15)
A Sense of Accomplishment	3.82	1.184	(8)	4.18	0.814	(9)
A World at Peace	3.76	1.215	(12)	4.24	1.010	(7)
A World of Beauty	3.30	1.142	(18)	3.75	0.972	(19)
Equality	3.38	1.144	(17)	4.03	0.921	(12)
Family Security	4.38	0.972	(1)	4.62	0.760	(1)
Freedom	4.29	1.047	(2)	4.53	0.741	(2)
Happiness	3.98	0.985	(5)	4.27	0.793	(4)
Inner Harmony	3.47	1.141	(16)	3.78	1.012	(17)
Mature Love	4.15	1.029	(3)	4.25	0.775	(6)
National Security	3.78	1.106	(10)	4.22	0.881	(8)
Physical Fitness	3.88	1.018	(6)	4.14	0.871	(10)
Pleasure	3.61	1.004	(14)	3.94	0.966	(14)
Salvation	3.72	1.311	(13)	3.96	1.128	(13)
Self-Respect	4.09	0.911	(4)	4.31	0.837	(3)
Social Recognition	3.25	0.999	(19)	3.78	1.004	(18)
True Friendship	3.84	1.061	(7)	4.26	0.815	(5)
Wisdom	3.77	1.081	(11)	4.05	0.971	(11)

Significant t indicated by asterisk

* $p < .05$

TO

TABLE 17
COMPOSITE TERMINAL VALUE RANKS FOR ALL RESEARCH GROUPS

	<u>C-7 Pre-Test</u>		<u>C-7 Post-Test</u>		<u>A-1 Post-Test</u>		<u>B-5 Post-Test</u>	
	Comp Rank		Comp Rank	Change from Pre-Test	Comp Rank		Comp Rank	
A Comfortable Life	12		16	(-4)	16		15	
An Exciting Life	13		12	(+1)	15		9	
A Sense of Accomplishment	7		9	(-2)	9		8	
A World at Peace	11		10	(+1)	7		12	
A World of Beauty	19		19	(0)	19		18	
Equality	18		15	(+3)	12		17	
Family Security	1		2	(-1)	1		1	
Freedom	2		1	(+1)	2		2	
Happiness	3		5	(-2)	4		5	
Inner Harmony	16		14	(+2)	17		16	
Mature Love	5		7	(-2)	6		3	
National Security	8		6	(+2)	8		10	
Physical Fitness	9		4	(+5)	10		6	
Pleasure	14		17	(-3)	14		14	
Salvation	17		13	(+4)	13		13	
Self-Respect	4		3	(+1)	3		4	
Social Recognition	15		18	(-3)	18		19	
True Friendship	6		8	(-2)	5		7	
Wisdom	10		11	(-1)	11		11	

TABLE 18
COMPOSITE INSTRUMENTAL RANKS FOR ALL RESEARCH GROUPS

	<u>C-7 Pre-Test</u>		<u>C-7 Post-Test</u>		<u>A-1 Post-Test</u>		<u>B-5 Post-Test</u>	
	Comp Rank		Comp Rank	Change from Pre-Test				
Active	14		14	(0)	14		12	
Ambitious	11		10	(+1)	10		6	
Broadminded	13		15	(-2)	19		13	
Capable	9		11	(-2)	11		9	
Cheerful	18		18	(0)	15		19	
Clean	6		7	(-1)	5		10	
Courageous	2		1	(+1)	3		5	
Forgiving	12		12	(0)	12		16	
Helpful	17		17	(0)	16		15	
Honest	1		3	(-2)	4		3	
Imaginative	19		19	(0)	18		18	
Independent	5		4	(+1)	7		4	
Intellectual	15		13	(+2)	13		14	
Logical	16		16	(0)	17		17	
Loving	3		5	(-2)	1		1	
Obedient	10		9	(+1)	9		9	
Polite	8		8	(0)	8		11	
Responsible	4		2	(+2)	2		2	
Self-Controlled	7		6	(+1)	6		7	

TABLE 19
EXPERIMENTAL GROUP (C-7) PRE-TEST/POST-TEST COMBINED VALUE CLUSTERS

	t	DEGREES OF FREEDOM	2-TAIL PROBABILITY
SELF INTEREST:			
Comfort and Happiness	-1.95	318.44	.052
HUMAN RIGHTS:			
Equality, Salvation, Self-Respect	1.69	319.91	.091
DISCIPLINE:			
Independent, Responsible, Self-Controlled	1.90	319.99	.059
SOLDIERLY IMAGE:			
National Security, Physical Fitness	2.14	319.73	.033

Demographic Factors

The demographic items of age, service component, rank, marital states and education level were cross-tabulated against each value individually. Tables 17 to 22 show the correlations as determined by Pearsons Product Moment. Over all, there were only 90 statistically significant correlations, 44 with terminal values and 46 with instrumental values. Of these, there was only one significant relationship that appeared consistently across all companies.

The sole recurring relationship in all three units was the instrumental value of Imaginative correlated with education. Within the experimental group it was shown that the lower the educational attainment, the lower the rating of importance. There were no top cell ratings of most important by those without high school completion.

There were two experimental group relationships that were statistically significant in the pre-test that were repeated in the post-test. Both of those were instrumental values. The first was the value Clean correlated with education. Those respondents indicating some college rated the value much lower in importance during the post-test. Respondents without high school completion increased their ratings of importance. High school graduates tended to have aggregate ratings on the cell labeled highly important. The second recurring relationship was the value Logical correlated with component. National Guardsmen commonly selected the cell highly important and remained stable from pre-test to post-test. Regular Army soldiers showed a greater amount of change, tending to aggregate in the highly important cell.

Although there are a number of statistically significant correlations, there appear to be no meaningful trends. Those few recurring relationships

with significant r values have been discussed and are not critical elements requiring detailed examination. The differences and similarities of the research groups' demographic composition can be seen in Table 26. As was intended, the notable difference is with Control Group 2 (B-5), having fewer Regular Army soldiers and generally older men.

TABLE 20
CORRELATION OF EXPERIMENTAL GROUP (C-7) POST-TEST TERMINAL VALUES AND DEMOGRAPHIC FACTORS

	AGE	COMPONENT	RANK	MARRIED	EDUCATION
A Comfortable Life	-.036	-.130*	.022	-.127*	-.030
An Exciting Life	-.179**	-.247**	.173**	.039	-.025
A Sense of Accomplishment	.025	-.074	.044	.018	-.052
A World at Peace	.036	.054	-.108	-.035	-.047
A World of Beauty	-.053	-.014	-.127*	-.136*	.002
Equality	.073	.67**	-.147*	-.127*	-.115
Family Security	.020	.000	-.146*	-.164*	-.118
Freedom	.059	.074	-.163*	-.067	.022
Happiness	.152*	-.083	-.110	-.208**	.015
Inner Harmony	.113	.005	-.111	-.086	.027
Mature Love	-.136*	-.195**	-.020	-.051	-.051
National Security	.026	.039	-.077	-.071	-.086
Physical Fitness	-.024	-.033	-.038	-.021	-.050
Pleasure	-.111	-.093	-.104	-.117	.082
Salvation	.034	-.056	-.099	.039	-.096
Self-Respect	.073	-.111	-.128*	-.092	-.042
Social Recognition	.102	-.033	.013	-.033	-.013
True Friendship	.041	-.100	-.037	-.056	-.012
Wisdom	.138*	.010	-.017	-.161*	-.020

Significant r indicated by asterisk

* $p < .05$

** $p < .01$

TABLE 21
CORRELATION OF EXPERIMENTAL GROUP (C-7) POST-TEST INSTRUMENTAL VALUES AND DEMOGRAPHIC FACTORS

	AGE	COMPONENT	RANK	MARRIED	EDUCATION
Active	.017	-.061	-.077	-.102	.006
Ambitious	.142*	.085	-.101	-.167**	-.066
Broadminded	.047	-.006	-.078	-.148*	-.115
Capable	-.061	-.029	-.039	-.106	-.070
Cheerful	.035	.034	-.012	-.039	-.077
Clean	.094	.021	-.172**	-.092	-.157*
Courageous	-.088	-.014	-.102	-.124	-.161*
Forgiving	.025	.013	-.097	.021	-.071
Helpful	.059	.041	-.051	-.118	-.099
Honest	.100	-.043	-.053	-.023	-.078
Imaginative	-.025	-.206**	.033	-.031	-.020
Independent	.093	.017	-.132*	-.179**	-.098
Intellectual	-.038	-.069	-.127*	.061	.116
Logical	-.009	-.160*	-.052	.046	.154*
Loving	-.028	-.054	-.125	-.175**	-.068
Obedient	.004	.020	.019	.119	-.041
Polite	.010	-.105	-.017	.025	-.079
Responsible	.056	-.035	-.189**	-.011	-.156*
Self-Controlled	.080	-.173**	.018	-.066	-.099

Significant r indicated by asterisk

* $p < .05$

** $p < .01$

TABLE 22

CORRELATION OF CONTROL GROUP 1 (A-1) TERMINAL VALUES AND DEMOGRAPHIC FACTORS

	AGE	COMPONENT	RANK	MARRIED	EDUCATION
A Comfortable Life	-.046	-.030	-.076	-.110	.000
An Exciting Life	-.066	-.093	-.036	.129*	-.097
A Sense of Accomplishment	-.063	.111	.015	.082	-.179**
A World at Peace	.026	.008	.010	-.050	-.030
A World of Beauty	.002	-.013	.029	.052	.008
Equality	.078	.038	-.016	-.054	.074
Family Security	-.030	.009	-.108	.018	.002
Freedom	.003	.038	-.072	.045	-.034
Happiness	.109	.000	.047	-.111	-.023
Inner Harmony	.072	-.114*	.015	-.090	.000
Mature Love	.092	-.073	-.041	-.061	.018
National Security	.032	-.046	.009	.023	.027
Physical Fitness	-.058	-.021	-.086	-.002	.022
Pleasure	-.097	-.156*	-.063	-.049	.019
Salvation	.060	-.021	-.091	.005	-.001
Self-Respect	-.008	.011	-.040	.031	-.045
Social Recognition	-.008	-.102	-.083	-.016	-.007
True Friendship	-.156**	-.115*	-.147*	-.019	-.023
Wisdom	-.062	-.099	-.024	.049	.004

Significant r indicated by asterisk

* $p < .05$ ** $p < .01$

TABLE 23

CORRELATION OF CONTROL GROUP 1 (A-1) INSTRUMENTAL VALUES AND DEMOGRAPHIC FACTORS

	AGE	COMPONENT	RANK	MARRIED	EDUCATION
Active	-.046	-.058	-.101	.090	-.069
Ambitious	-.054	.066	-.024	.144*	-.094
Broadminded	-.035	-.052	.026	.069	-.030
Capable	.082	.046	-.051	-.049	-.018
Cheerful	.080	.003	-.043	-.036	-.037
Clean	.010	-.012	-.026	.030	-.018
Courageous	.019	-.106	-.040	.004	-.008
Forgiving	-.017	.010	.076	.000	-.058
Helpful	.036	.037	.045	.045	.039
Honest	.082	.104	-.011	.032	.120*
Imaginative	-.015	.015	-.079	.079	-.145*
Independent	.117*	.057	.013	-.023	-.019
Intellectual	.085	-.014	.108	-.003	.184**
Logical	.040	.035	-.064	.062	.012
Loving	-.096	-.019	-.029	.030	.010
Obedient	-.010	.098	-.167*	.070	-.059
Polite	.014	.071	.057	.003	.029
Responsible	.070	.009	-.126*	-.051	.022
Self-Controlled	-.017	.035	-.111	-.019	-.063

Significant r indicated by asterisk

* p < .05

** p < .01

TABLE 24

CORRELATION OF CONTROL GROUP 2 (B-5) TERMINAL VALUES AND DEMOGRAPHIC FACTORS

	AGE	COMPONENT	RANK	MARRIED	EDUCATION
A Comfortable Life	.124	.032	.090	-.054	.090
An Exciting Life	.149	-.183*	.070	-.028	.284**
A Sense of Accomplishment	.150	.054	-.126	-.056	.068
A World at Peace	.007	.010	.036	-.012	.034
A World of Beauty	.206**	-.169*	.043	-.010	.152
Equality	.103	-.076	-.003	-.199*	.182*
Family Security	.034	.088	-.125	-.260**	-.021
Freedom	.089	.071	-.006	-.062	.038
Happiness	.039	.002	-.022	-.182*	.089
Inner Harmony	.109	-.028	.125	-.106	.184*
Mature Love	-.005	-.094	.043	-.256**	.059
National Security	.127	-.107	.000	-.006	.005
Physical Fitness	.069	-.028	-.055	.053	.046
Pleasure	.071	-.005	-.065	-.094	-.081
Salvation	.095	.024	-.030	-.303**	.054
Self-Respect	.131	.028	.017	-.098	.138
Social Recognition	.123	.108	-.065	-.030	.039
True Friendship	.086	.085	-.108	-.009	-.006
Wisdom	.095	-.035	-.015	-.101	-.030

Significant r indicated by asterisk

* $p < .05$ ** $p < .01$

TABLE 25

CORRELATION OF CONTROL GROUP 2 (B-5) INSTRUMENTAL VALUES AND DEMOGRAPHIC FACTORS

	AGE	COMPONENT	RANK	MARRIED	EDUCATION
Active	.171*	-.044	.138	-.068	.279**
Ambitious	.169*	.053	.043	-.070	-.064
Broadminded	.128	.126	.107	-.125	-.014
Capable	.145	-.112	.017	-.119	.138
Cheerful	.096	.029	-.045	-.061	-.133
Clean	.111	.068	-.150	-.048	-.072
Courageous	.182*	-.026	-.068	-.094	.073
Forgiving	-.035	.135	.072	-.068	-.048
Helpful	.057	.174*	.019	-.098	-.046
Honest	.108	.101	-.090	-.043	.086
Imaginative	.149	-.035	-.022	.012	.185*
Independent	.078	-.115	-.029	-.220**	.078
Intellectual	.114	.087	.122	-.100	.156
Logical	.103	-.002	.257**	-.176*	.167*
Loving	-.028	.072	.197*	-.124	-.146
Obedient	.166*	.065	-.105	-.169*	-.018
Polite	.087	-.079	-.126	-.197*	.102
Responsible	.137	-.018	.003	-.094	.045
Self-Controlled	-.004	.119	-.109	-.069	-.086

Significant r indicated by asterisk

* $p < .05$ ** $p < .01$

TABLE 26
FREQUENCY OF DEMOGRAPHIC FACTORS FOR RESEARCH GROUPS

	EXPERIMENTAL GROUP				CONTROL GROUP 1		CONTROL GROUP 2	
	C-7 Pre-Test n	C-7 Post-Test %	C-7 Post-Test n	C-7 Post-Test %	A-1 Post-Test n	A-1 Post-Test %	B-5 Post-Test n	B-5 Post-Test %
Component: RA	(134)	77.9	(114)	74.0	(134)	71.3	(52)	52.0
NG	(29)	16.9	(36)	23.4	(36)	19.1	(42)	42.0
ER	(9)	5.3	(4)	2.6	(18)	9.6	(6)	6.0
Rank: E-1	(136)	79.1	(116)	75.3	(155)	82.4	(54)	54.0
E-2	(26)	15.1	(30)	19.5	(20)	10.6	(28)	28.0
E-3	(10)	5.8	(8)	5.2	(8)	4.3	(18)	18.0
E-4+					(5)	2.6		
Marital Status: Single	(157)	91.9	(135)	87.7	(167)	88.8	(83)	83.0
Married	(14)	8.1	(19)	12.3	(21)	11.2	(17)	17.0
Education: 8 grade or less	(1)	0.6	(1)	0.6	(1)	0.5	(1)	1.0
9-11 grade	(23)	13.4	(9)	5.8	(21)	11.2	(17)	17.0
HS Graduate	(141)	82.0	(136)	88.3	(148)	78.7	(51)	51.0
Some college	(7)	4.1	(8)	5.2	(18)	9.6	(28)	28.0
College graduate							(3)	3.0
Age: 17-18	(120)	69.8	(93)	60.3	(101)	53.7	(34)	34.0
19-21	(40)	23.3	(53)	34.4	(64)	34.0	(43)	43.0
22-23	(6)	3.5	(4)	2.5	(12)	6.4	(13)	13.0
24-26	(3)	1.7	(2)	1.2	(6)	3.2	(5)	5.0
27-Up	(3)	1.7	(2)	1.2	(5)	2.6	(5)	5.0
TOTAL n	172		154		188		100	

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

At the beginning of this exploration of human values, anything was possible as a final conclusion. Much material, from many academic disciplines was reviewed to determine previous treatments of the subject and extract relevant portions. Three companies of soldiers from three different battalions provided input by sharing their feelings as to the importance of the values on a survey questionnaire. Every attempt was made to conscientiously select the significant information, combine it, and prepare a factual document that would be a timely, necessary, and worthwhile contribution.

Values were found to be determinants of behavior. They represent what is good, desirable, and what should be worked for. Actions and decisions are guided by individual value systems. Values are learned from role models and through experience. While they are fewer in number than attitudes and also more stable, they can change. Changes and reordering of value systems is possible over time.

Organizations have for years sought to apply behavioral science theory and communication concepts in efforts to improve the productivity, efficiency and satisfaction of their members. Knowledge of human values is becoming increasingly important in that effort. It was found that many authors felt the values held by a number of young people in today's

changing society are in conflict with those necessary for effective participation in organizations or institutions. Organizations can exert influence over the value systems of their members. With a deliberate effort and social support productive changes can be initiated and maintained.

The young men participating in Infantry OSUT undergo more than training in just measurable military skills. Those aspects of the program that endeavor to prepare the men for the new life-style inherent with service in the Army are referred to as the "soldierization" process. The research conducted as part of this study relates to a portion of that process.

Research questions were formulated to guide the examination of the resulting change. Those questions were:

1. Is there a significant change in the values of the soldiers who complete this training program?
2. Does the training change their terminal values as well as instrumental values?
3. Are there demographic characteristics, such as age, or component, or education, affecting differential degrees of value change?

In regard to the first question, there is not a clear "yes" or "no" response. The result anticipated by General Meyer (1982) in his letter seems to have been met. While a meaningful change has occurred in the rank order for the values of Physical Fitness, Salvation, Equality, National Security to greater importance and the values of Comfortable Life, Pleasure and Social Recognition to lesser importance, the statistical significance is not particularly momentous. Viewed collectively, the related value clusters of Soldierly Image, Discipline and Self-Interest show improved statistical significance in the desired direction

of change. A modest reshaping of value systems so that they are not in conflict with the values necessary for productive service in the Army appears to be the ultimate result.

As for the second question, there were more meaningful changes in terminal value rank order than instrumental value rank order. Terminal values were defined as referring to ultimate goals while instrumental values related to desirable behavior. Often the trainees are entering the job market for the first time after leaving school and have not yet formulated long term goals. As such, it is understandable that having determined what is worth striving for, would influence the rating changes of terminal values from pre-test to post-test.

The third question can be answered simply. There are no significant differences of any importance based upon demographic characteristics.

In conclusion, it can be stated that the elements of the Professional Army Ethic: loyalty, personal responsibility, selfless service and commitment, competence, candor and courage; appear to be consistent with the value systems held by soldiers completing Infantry OSUT.

Recommendations

The topic of professional military values and ethics is now a part of Army leadership doctrine. A vast amount of activity is on-going that will incorporate knowledge of soldiers values into human resource development programs. It is essential that these efforts continue.

The following suggestions are offered to anyone conducting similar research of follow-up studies. While they may be impractical with limited authority or resources, greater reliability and validity will surely result.

- . Expand the study to include soldiers of other branches and training programs.
- . Randomly select trainees so as to include members of all training battalions conducting the program.
- . Provide feed-back to the experimental group as to how they rated key values on the pre-test as compared to career soldiers in that field.
- . Incorporate a design to measure the similarity of trainees value systems with those of the training unit cadre.
- . Test the effectiveness of professional ethics training packages for IET with trainees while still in the developmental phase using a value survey questionnaire.

ENDNOTES

1. During an interview at Ft. Benning, Georgia, on 27 July 1982, the ARI researcher, Frederick N. Dyer, Ph.D, explained that he was a former student of Dr. Rokeach. The modifications were personally approved by Dr. Rokeach who concurred with the validity of those procedural adjustments.
2. The modification was the reduction of the rating scale from seven points to five points. This was done to employ the optical scanner at the university computer center for coding the responses as the available equipment was only capable of a five item per line scan. The thesis advisory committee and Dr. Dyer indicate that a five point scale is as valid as a seven point scale in most cases, according to current research. Mention of this is made by Michael Ryan, "The Likert Scale's Midpoint In Communication Research," Journalism Quarterly 57, No. 2 (Summer 1980), p. 305.

UNCLASSIFIED

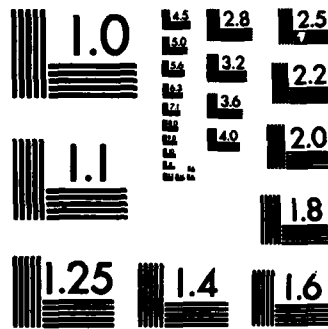
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FIGURE 1

RIN



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

A P P E N D I X A

UNITED STATES ARMY
THE CHIEF OF STAFF

88

29 AUG 1982

Dear Captain Krysa:

In addition to my article in the October 1980 issue of Army magazine, I commend an earlier issue (October 1979) in which I laid out the Army's obligation to foster individual development of the "whole man": the Soldier's social, mental, physical and spiritual dimensions. As you may not have that issue at the University library, I've enclosed a copy. The reason I reference it is that I believe the Army must first establish firmly in each soldier a conviction that he or she is "valuable" before we can realistically expect the new Soldier to be fully supportive of the Army, its values, its goals, and its traditions. Then we can build on that foundation the necessary soldierly qualities of competence, commitment, courage and candor; and progress over time to achieve fully individual commitment to the Army ethic, its value set as elaborated in FM 100-1.

That ethic -- embodying loyalty, self-sacrifice, and personal responsibility -- may be easily subscribed to by a few new trainees, but much of it runs counter to many of society's prevailing attitudes. So I would expect it to be grasped only in stages during one's professional life. If that occurs early, all the better; but I suspect that while we can train to explicit standards in military skills and behavior (discipline) during IET, the best we can expect for the vast majority of trainees is a modest shaping (or reshaping) of their personal value sets so that these are not in conflict with the Army ethic.

During IET, we seek to develop a disciplined, highly motivated Soldier who is qualified in his basic weapon, physically conditioned, and skilled in the fundamentals of soldiering. During the "soldierization" process which is a part of IET, we seek to effect basic attitudinal and behavioral changes. Those who reject discipline, or who exhibit an obvious lack of motivation or ability are quickly eliminated. We know through evaluation that most trainees upon completion of training -- in spite of problems and complaints -- finish IET with high morale, a vastly improved attitude about themselves and the Army, an appreciation of the importance of mutual support within a unit, and an awareness that their survival in combat is dependent upon well developed individual and team skills. Assuredly this is a good start in shaping individual notions regarding personal responsibility, loyalty and self-sacrifice.

2 9 AUG 1982

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As you are probably aware, the resources we devote to training are subjected annually to the most rigorous scrutiny. Over the years we have been continuously challenged to justify the time, money and personnel required to achieve specific levels of competence in measurable military skills. Values are intangible in this setting, and consequently overlooked by most critics. Yet they may be the most important product of our training programs. To the degree that you are able through your research to shed light on what is desirable (and achievable) in fostering value changes during initial training, you will be making a valuable contribution to your profession.

I wish you good luck in that effort.



E. C. MEYER
General, United States Army
Chief of Staff

Captain John C. Krysa
2007 Sandy Acres Drive
Plover, Wisconsin 54467

A P P E N D I X B

GLOSSARY OF MILITARY ABBREVIATIONS AND TERMS

- ARI - Army Research Institute for the Behavioral and Social Sciences.
- APRT - Advanced Physical Readiness Test, a standard evaluation of physical conditioning consisting of 2 minutes of push-ups, 2 minutes of sit-ups and a 2-mile run.
- Army Command and General Staff College - A service college that prepares Majors and Lieutenant Colonels for battalion-level command and general staff duties within major commands and activities.
- AWC - Army War College - A senior service that prepares select senior officers normally in the grade of LTC or COL for high level Army command and joint services staff duty.
- Battalion - A unit composed of approximately 3-7 companies, normally commanded by a Lieutenant Colonel and is the smallest organization capable of supporting itself.
- Chief of Staff of the Army - Senior ranking officer of the Army.
- Company - A unit composed of approximately 4-6 platoons, normally commanded by a Captain, having a strength of 100-240 soldiers.
- Company Grade Officer - A commissioned officer in the rank of 2nd Lieutenant, 1st Lieutenant or Captain, senior to all enlisted grades.
- Enlisted Men - All soldiers in the ranks of Private through Sergeant Major.
- Field Grade Officer - A commissioned officer in the rank of Major, Lieutenant Colonel or Colonel, senior to company grade officers.
- FM - Field Manual - a publication intended for reference, to convey procedural information or doctrine. Part of an Army-wide system that includes Technical Manuals, Army Regulations and current information pamphlets.
- General Officers - Senior commissioned officers of the Army in the ranks of Brigadier General (BG), Major General (MG), Lieutenant General (LTG) or General (GEN).
- IET - Initial Entry Training - those programs that prepare soldiers for duty at entry level positions by orienting them to the

apprentice skill level in a specific occupational specialty.

Infantry - "Queen of Battle" - the basic ground-gaining arm of the Army capable of operating in any terrain and environment, able to move to the battle on foot, armored fighting vehicle, parachute, helicopter or assault boat. The mission is "to engage and close with the enemy by fire and maneuver in order to destroy or capture him, or to repel his attack by fire, close combat or counter-attack."

NCO - Noncommissioned Officer, experienced soldier in the rank of Corporal to Sergeant Major, with duties as a leader and supervisor coupled with technical proficiency.

OE - Organizational Effectiveness, the program of Organizational Development and human resource development specialists who serve as internal consultants at all levels of the Army.

OCS - Branch immaterial officer candidate course - the program that trains selected enlisted soldiers with at least two years of college, to become commissioned as 2nd Lieutenants.

OSUT - One Station Unit Training - initial entry training program that combines basic and advanced individual training for specific occupational specialties into one comprehensive package.

Rank - Position in the organization that is related to pay grade, authority and responsibility. Soldiers who are Privates in the grade of E-1 to E-3 and Specialists 4. E-4's are the bulk of the workers. They are supervised by NCO's, soldiers with the rank of Corporal E-4, Sergeants E-5 and up, Specialists E-5 or E-6.

TRADOC - Training and Doctrine Command, a major headquarters commanded by a General, concerned with developing, conducting and evaluating training, doctrine and operational concepts Army-wide.

A P P E N D I X C

VALUE SURVEY QUESTIONNAIRE

Purpose

This survey is part of a research project about soldiers values. It asks you to rate the importance of certain values.

Confidentiality

Your individual responses are confidential. This survey is not a test. It will not be used to evaluate you in any way. The results of this survey will be combined into a group summary by a researcher from the University of Wisconsin.

What Will Be Done With The Results

The survey results will provide a summary description of your unit. The results will help the researcher explain to the chain of command how soldiers feel about things that are important to them.

Instructions

Answer each item honestly. The survey can only be of use if it describes how you really see things. The questionnaire is designed to measure how different people feel about different values. Your task is to rate each value on its importance to you in your own life. Use only a #2 pencil to darken your response on the answer sheet. Do not make any stray marks.

Modified Rokeach Value Survey

PRESCRIBING DIRECTIVE

AR 70-1

1. AUTHORITY

10 USC Sec 4505

2. PRINCIPAL PURPOSE(S):

The data collected with the attached form are to be used for research purposes only.

3. ROUTINE USES

This is an adaptation of a survey form employed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR70-1. It is being used to gather data for graduate research conducted under the provisions of AR621-1. Any identifiers requested (roster number) are to be used for administrative and statistical purposes only. Full confidentiality of the responses will be maintained in the processing of these data.

4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION

Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.

FORM

Privacy Act Statement - 26 Sep 75

Part I
Value Survey

This questionnaire is designed to measure how people feel about different values. Everyone is asked to rate each value on its importance to him in his own life. You are to do this rating using the following scale:

- A Not at all important in my life.
- B Somewhat important in my life.
- C Moderately important in my life.
- D Highly important in my life.
- E One of the most important values in my life.

1. A COMFORTABLE LIFE (a prosperous life)
2. AN EXCITING LIFE (a stimulating, active life)
3. A SENSE OF ACCOMPLISHMENT (lasting contribution)
4. A WORLD AT PEACE (free of war and conflict)
5. A WORLD OF BEAUTY (beauty of nature and the arts)
6. EQUALITY (brotherhood, equal opportunity for all)
7. FAMILY SECURITY (taking care of loved ones)
8. FREEDOM (independence, free choice)
9. HAPPINESS (contentedness)
10. INNER HARMONY (freedom from inner conflict)
11. MATURE LOVE (sexual and spiritual intimacy)
12. NATIONAL SECURITY (protection from attack)
13. PHYSICAL FITNESS (endurance, strength)
14. PLEASURE (an enjoyable, leisurely life)
15. SALVATION (saved, eternal life)
16. SELF-RESPECT (self-esteem)
17. SOCIAL RECOGNITION (respect, admiration)
18. TRUE FRIENDSHIP (close companionship)
19. WISDOM (a mature understanding of life)

- A Not at all important in my life.
- B Somewhat important in my life.
- C Moderately important in my life.
- D Highly important in my life.
- E One of the most important values in my life.

- 20. ACTIVE (energetic)
- 21. AMBITIOUS (hard-working, aspiring)
- 22. BROADMINDED (open-minded)
- 23. CAPABLE (competent, effective)
- 24. CHEERFUL (Lighthearted, joyful)
- 25. CLEAN (neat, tidy)
- 26. COURAGEOUS (standing up for your beliefs)
- 27. FORGIVING (willing to pardon others)
- 28. HELPFUL (working for the welfare of others)
- 29. HONEST (sincere, truthful)
- 30. IMAGINATIVE (daring, creative)
- 31. INDEPENDENT (self-reliant, self-sufficient)
- 32. INTELLECTUAL (intelligent, reflective)
- 33. LOGICAL (consistent, rational)
- 34. LOVING (affectionate, tender)
- 35. OBEDIENT (dutiful, respectful)
- 36. POLITE (courteous, well-mannered)
- 37. RESPONSIBLE (dependable, reliable)
- 38. SELF-CONTROLLED (restrained, self-disciplined)

(go to next page)

Part II
Background

39. What is your component?
- A. Regular Army
 - B. National Guard
 - C. Army Reserve
40. What is your rank/pay grade?
- A. Private E-1
 - B. Private E-2
 - C. Private First Class E-3
 - D. Specialist 4 E-4
 - E. Sergeant E-5 or above
41. Are you married?
- A. Yes
 - B. No
42. What is the highest grade of school you have finished?
- A. 8th grade or less
 - B. 9th to 11th grade
 - C. High School graduate or G.E.D.
 - D. 1 to 3 years of college or A.A. degree
 - E. College graduate (4 years of college or more)

A P P E N D I X D

INSTRUCTIONS FOR
SURVEY ADMINISTRATION

1. Prior to arrival of soldiers, place a survey questionnaire, an answer sheet and a #2 pencil at each desk. Set up overhead projector with vugraph slide of answer sheet.
2. Upon soldiers arrival, receive the status report from the Senior Drill Sergeant and seat the company. Make appropriate welcome and introduction.
3. Read the following instructions:

Today you are going to participate in a survey. This survey is part of a research project about soldiers values. It asks you to rate the importance of certain values.

Your individual responses are confidential. This survey is not a test. It will not be used to evaluate you in any way. The results of this survey will be combined into a group summary by a researcher from the University of Wisconsin.

For statistical analysis purposes, you will need to provide your roster number and age. To do this, take the answer sheet that is on the desk in front of you and turn it side ways so that the words X5 Answer Sheet are in the top left hand corner. (Show slide with X5 at top.) Go to the block that says Identification Number, Social Security Number. (Circle the block with a VGT marker, then pause.) In the first three spaces, write your roster number using the pencil on the desk. (Change to slide of SSN block, write a roster number on the spaces of the slide.)

Darken the circles below to indicate your numbers. (Darken the circles on the slide - and pause.) In the next two spaces write in how old you are and darken the circles below. (Do so on the slide - and pause.)

Now turn your answer sheet side ways like this. (Turn the slide so that the response columns are on the bottom.) You are ready to proceed.

Answer each item honestly. The survey can only be of use if it describes how you really see things. The questionnaire is designed to measure how different people feel about different values. Your task is to rate each value on its importance to you in your own life.

Open the survey to the second page. Using the scale at the top of the page, rate each of the values. Be sure to follow the answer sheet carefully. Match the numbers on the answer sheet with the numbers next to each value. Mark only one rating for each number. Answer all items on the survey. (Turn off slide)

Are there any questions? Begin work.

[illegible][illegible]

1973

T F	11	(A)(B)(C)(D)(E)	T F	61	(A)(B)(C)(D)(E)	T F	101	(A)(B)(C)(D)(E)
T F	21	(A)(B)(C)(D)(E)	T F	41	(A)(B)(C)(D)(E)	T F	81	(A)(B)(C)(D)(E)
T F	22	(A)(B)(C)(D)(E)	T F	42	(A)(B)(C)(D)(E)	T F	82	(A)(B)(C)(D)(E)
T F	23	(A)(B)(C)(D)(E)	T F	43	(A)(B)(C)(D)(E)	T F	83	(A)(B)(C)(D)(E)
T F	101	(A)(B)(C)(D)(E)	T F	62	(A)(B)(C)(D)(E)	T F	102	(A)(B)(C)(D)(E)
T F	102	(A)(B)(C)(D)(E)	T F	63	(A)(B)(C)(D)(E)	T F	103	(A)(B)(C)(D)(E)

1973

T F

T F

T F

BIBLIOGRAPHY

Books

- Azumi, Koya and Hage, Jerald. Organizational Systems. Lexington, MA: D. C. Heath and Co., 1972.
- Babbie, Earl. The Practice of Social Research. Belmont, CA: Wadsworth Publishing Co., Inc., 1979.
- Baier, Kurt and Rescher, Nicholas. Values and the Future. New York: The Free Press, 1969.
- Bandura, Albert. Social Learning Theory. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1977.
- Bennis, Warren G. American Bureaucracy. New Brunswick: Transaction, Inc., 1970.
- Bennis, Warren G.; Benne, Kenneth D.; Chin, Robert; Corey, Kenneth E.; The Planning of Change. 3rd ed. New York: Holt, Rhinehart and Winston, 1976.
- Berlo, David D. The Process of Communication. New York: Holt, Rhinehart and Winston, 1960.
- Davis, Sheldon A. and Tannenbaum, Robert. "Values, Men, and Organizations". Eds. N. Margules and A. Raia. Organizational Development Values, Process and Technology, pp. 9-30. New York: McGraw-Hill Book Co., 1972.
- Davis, Keith. Human Behavior at Work, Relations and Organizational Behavior. 4th ed., New York: McGraw-Hill, 1972.
- Faules, Don F. "The Impact of Values on Organizational Communication in Organizations". Communication in Organizations, Zimmerman. St. Paul: West Publishing Co., 1976.
- Gabriel, Richard A. "Modernism vs. Pre-Modernism: The Need to Rethink the Basis of Military Organizational Forms". Military Ethics and Professionalism, A Collection of Essays, pp. 55-74. Eds. J. Brown and M.J. Collins. Washington, D.C.: National Defense University Press, 1981.

- Hall, Brian P. The Development of Consciousness A Confluent Theory of Values. New York: Paulist Press, 1976.
- Huse, Edgar F. Organization Development and Change. St. Paul: West Publishing Co., 1975.
- Kaufman, Herbert. The Limits of Organizational Change. University of Alabama Press, 1971.
- Kelly, Thomas E. "Ethics in the Military Profession: The Continuing Tension". Military Ethics and Professionalism: A Collection of Essays, pp. 23-38. Eds. J. Brown and M. J. Collins. Washington, D.C.: National Defense University Press, 1981.
- Kluckhohn, Clyde. "Values and Value-Orientations in the Theory of Action: An Exploration in Definition and Classification". Eds. T. Parsons and E. A. Shils. Toward A General Theory of Action. Cambridge: Harvard University Press, 1962.
- Knicker, Charles R. You and Values Education. Colombus, Ohio: Charles E. Merrill Publishing Co., 1977.
- Littlejohn, Stephen W. Theories of Human Communication. Columbus: Merrill Publishing Co., 1978.
- Marguiles, Newton and Raia, Anthony P. Organizational Development Values, Process and Technology. New York: McGraw-Hill Book Co., 1972.
- McDonald, John. The Game of Business. Garden City: Doubleday and Company, Inc., 1975.
- Nelson, Jack L. Introduction to Value Inquiry. New Jersey: Hayden, 1976.
- Nimmo, Dan. Communication Yearbook 3. 3rd ed. New Brunswick: Transaction, Inc., 1979.
- Pugh, George Edgin. The Biological Origin of Human Values. New York: Basic Books, Inc., 1977.
- Rescher, Nicholas. Introduction to Value Theory. Englewood Cliffs, NJ: Prentice-Hall Inc., 1969.
- Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco: Jossey-Bass, 1968.
- Rokeach, Milton. The Nature of Human Values. New York: The Free Press, 1973.
- Rokeach, Milton. Understanding Human Values. New York: The Free Press, 1979.

Rokeach, Milton. "Value Theory and Communication Research: Review and Commentary". Communication Yearbook 3, 3rd ed. New Brunswick: Transaction, Inc., 1979.

Sikula, Andrew F. Values, Motivation and Management. Champaign, IL: Stipes Publishing Co., 1972.

Wakin, Malham M. War, Morality and the Military Profession. Colorado: Westview Press, 1979.

Periodicals

Becker, Boris W. and Connor, Patrick E. "Personal Values of the Heavy User of Mass Media". Journal of Advertising Research, 21, (October 1981): 37-43.

Blair, John D. "Social and Value Integration of Youth in the Military". Youth and Society 10 (September 1978): 33-46.

Boote, Alfred S. "Market Segmentation by Personal Values and Salient Product Attributes". Journal of Advertising Research 21 (February 1981): 29-35.

Cherrington, David. Quoted in "Manager's Example Called Key to Good Work Values". Chicago Tribune, 22 August 1982, sec. 15, p. 1s.

Coates, Joseph. "Man, You Ain't Seen Nothing Yet". OE Communique 1 (1982): 18-19.

Connor, Patrick E. and Becker, Boris W. "Values and the Organization: Suggestions for Research". Academy of Management Journal 18 (September 1975): 550-561.

Cotton, Charles A. "Institutional and Occupational Values in Canada's Army". Armed Forces and Society 8 (Fall 1981): 99-110.

Faris, John H. "An Alternative Perspective to Savage and Gabriel". Armed Forces and Society 3 (Spring 1977): 457-462.

Gabriel, Richard A. "Acquiring New Values in Military Bureaucracies: A Preliminary Model". Journal of Political and Military Sociology 7 (Spring 1979): 89-102.

Goodpaster, Andrew J. "Moral Choices: Military Ethics and National Values in the 1980's". Liberal Education 65 (Summer 1979): 249-258.

Greenbaum, Charles W. "The Small Group Under the Gun: Uses of Small Groups in Battle Conditions". The Journal of Applied Behavioral Science 15 (March 1979): 392-405.

- Grusky, Oscar. "Education and Military Commitment." Armed Forces and Society 133-147.
- Hartjen, Raymond C. "In Support of a Regimental System." Soldier Support Journal 9 (February 1982): 4-7.
- Hoge, Dean R. "Changes in College Students' Value Patterns in the 1950's, 1960's, and the 1970's." Sociology of Education 49 (April 1976): 155-163.
- Lane, Jack F. "Military Code of Ethics: A Proposal." Military Review 59 (October 1979): 64-72.
- Manley, T. Rodger, and Manley, Eleyse T. "A Comparison of the Personal Values and Operative Goals of School Psychologists and School Superintendents." Journal of School Psychology 16 (Spring 1978): 99-109.
- Meyer, Edward C. "Fulfilling Mission Means Being Ready to Fight Anytime Anywhere." Army 29 (October 1979): 18-21.
- Meyer, Edward C. "Loyalty, Responsibility, Selflessness Professional Ethics Is Key to Well-Led, Trained Army." Army 30 (October 1980): 11-14.
- Meyer, Edward C. "Leadership: A Return to Basics." Military Review 60 (July 1980): 4-9.
- Moskos, Charles C. "From Institution to Occupation Trends in Military Organization." Armed Forces and Society 4 (November 1977): 41-50.
- Narel, James L. "Values and the Professional Soldier." Parameters Journal of the U.S. Army War College 11 (December 1981): 74-79.
- Nouza, Roger A. "Value-Oriented Sales Training." Training and Development Journal 34 (November 1980): 26-28.
- Powell, Lewis F. "The Eroding Authority." Vital Speeches of the Day 39 (1971-1972): 752.
- Rao, S. Narayna. "Personal Values and Their Relation to Occupational Preferences Among Pupils at the Terminal Stage of Secondary Education." Psychological Studies 20 (1975): 7-15.
- Rokeach, Milton. "Change and Stability in American Value Systems." Public Opinion Quarterly 38 (Summer 1974): 223-238.
- Ronen, Simcha. "Personal Values: A Basis for Work Motivational Set and Work Attitude." Organizational Behavior and Human Performance 21 (1978): 80-107.

- Saleh, S. D.; Toye, J. R.; and Sievert, H. A. "Occupational Values, Environments, and Levels." Journal of Vocational Behavior 6 (1975): 235-243.
- Savage, Paul L. and Gabriel, Richard A. "Cohesion and Disintegration in the American Army: An Alternative Perspective." Armed Forces and Society 2 (Spring 1976): 340-376.
- Savage, Paul L. and Gabriel, Richard A. "Turning Away From Managerialism: The Environment of Military Leadership." Military Review 60 (July 1980): 55-64.
- Sikula, Andrew F. "The Values and Value Systems of Governmental Executives." Public Personnel Management 2 (February 1973): 16-22.
- Sikula, Andrew F. "The Values and Value Systems of Industrial Personnel Managers." Public Personnel Management 16 (August 1973): 305-309.
- Smith, Grady A. "Values, Ethics: Born of Enlightened Choice." Army 32 (June 1982): 11-13.
- Starry, Donn A. "Values, Not Scores, the Best Measure of Soldier Quality." Army 30 (October 1980): 11-17.
- Stone, Eugene F. "Job Scope, Job Satisfaction, and the Protestant Ethic: A Study of Enlisted Men in the U.S. Navy." Journal of Vocational Behavior 7 (1975): 215-234.
- Ulmer, Walter F. "Notes on Leadership For the 1980's." Military Review 60 (July 1980): 10-12.
- U.S. Army, Military Professional Ethics Division. "Developing Professional Ethics." Soldier Support Journal 9 (February 1982): 8-11.
- White, J. Kenneth, and Ruh, Robert A. "Effects of Personal Values on the Relationship Between Participation and Job Attitudes." Administrative Science Quarterly 18 (1973): 506-514.
- Unpublished Dissertations, Reports and Theses
- Anderson, Betty S. "Adjustment to Recruit Training." Masters Thesis, Naval Postgraduate School, 1974.
- Barrett, Gerald V. "Relationships Among Job Structural Attributes, Retention, Task Descriptions, Aptitudes and Work Values." Technical Report, Akron University, 1975.
- Butler, Richard P. "Comparison of USMA Graduates From the Class of 1950 With Graduates from Other Colleges on Selected Variables." Product Appraisal Report, US Military Academy, 1971.

- Dalkey, Norman C. and Rourke, Daniel L. "Experimental Assessment of Delphi Procedures With Group Value Judgements." Report R-612-ARPA, Rand Corporation, Santa Monica, CA, 1971.
- Drisco, Melville A. "An Analysis of Professional Military Ethics: Their Importance, Development and Inculcation." Study Project, U.S. Army War College, 1977.
- Elsea, Kenneth J. "The Role of Communication in Organizational Socialization: A Selective Review of Relevant Literature." Paper presented to the International Communication Association Convention, Philadelphia, PA, 1979.
- England, George W. "Personal Values and Military Administration." Technical Report, Industrial Relations Center, University of Minnesota, 1970.
- Friedlander, Frank. "Purpose and Values in O.D.: Toward Personal Theory and Practice." Monograph, American Society for Training and Development, 1976.
- Girdon, Terry A. "Current Military Values." Research Paper, Naval War College, 1980.
- Girdon, Terry A. "A Summary Report of American Military Values An Introductory Study." Proceedings of the Inter-University Seminar on Armed Forces and Society National Conference, Chicago, IL, 1980.
- Griffeth, Rodger W. et al. "Advanced Training and Initial Duty Station Values Expectations and Intentions of Marine Corps Enlisted Personnel." Technical Report, Center for Management and Organizational Research, University of South Carolina, 1979.
- Henderson, Dee W. "A Measurement and Analysis of Values Systems and Behavioral Change as Related to a Public Executive Development Workshop." Ph.D. dissertation, The American University, 1973.
- Lazar, Joyce B. "Research Problems and Issues in the Area of Socialization." Research report, George Washington University, 1973.
- Maynard, William S. et al. "Perceptions and Prescriptions for Basic Training Among Enlisted Men at Three Points in Their Navy Career." Technical Report, Battelle Memorial Institute Human Affairs Research Center, 1974.
- Miller, John R. "The Volunteer Army: A Study of Quality." Masters Thesis, U.S. Army Command and General Staff College, 1981.
- Mobley, William H. et al. "An Analysis of Recruit Training Attrition in the U.S. Marine Corps." Technical Report, Center for Management and Organizational Research, University of South Carolina, 1978.

Nielsen, Robert M. "Unions and Values." An essay from the pamphlet "Academic Unions, Values and Democracy." American Federation of Teachers, 1980.

Phillips, James C. "Authority and Compliance." Research study, Air University at Maxwell AFB., 1974.

Schultz, Carolyn W. "Power in Nursing: A Model for the Effective Use of Power Demonstrated by a Curriculum Guide for Nursing Students and a Seminar Plan for Practicing Professionals Developed From the Literature on Power and Values." Ph.D. dissertation, Seattle University, 1982.

Vaughan, Michael R. and Kriner, Richard E. "The Army Racial Awareness Program: A Case Study of Program Impact on Personal Values." Special Report, Human Resources Research Organization, 1975.

U.S. Army Research Institute for the Behavioral and Social Sciences, "A Comparison of the Values of Highly Successful Senior Field Grade Infantry Officers with Company Grade Infantry Officers and Civilian," by Frederick N. Dyer and Richard E. Hilligoss, Research Report, Ft. Benning, GA: ARI Field Unit, 1981.

Miscellaneous Sources

American Society for Training and Development, Resource Center, Washington, D.C. Correspondence regarding human values and organizational development, August 1982.

Bryant, James, LTC. "Leadership, FM 22-100." Draft of the military leadership manual, Leadership and Ethics Committee, U.S. Army Command and General Staff College, July 1982.

Burns, Frank, LTC. "Performance Management Workshop." Mimeographed paper for an Organizational Effectiveness Workshop, Organizational Effectiveness Office, Office of the Chief of Staff of the Army.

Dyer, Frederick N. Ph.D. Senior researcher of the Army Research Institute, Fort Benning Field Office. Personal discussion and collaboration. 1981-1982.

Fitton, Robert B. "Reference Book, Leader Development Program, Values." Draft reference book, Leadership and Ethics Committee, U.S. Army Command and General Staff College, August 1982.

James, Clayton W. CPT. Assistant Operations and Training Officer, 1st ITB, Ft. Benning, GA. Personal discussions and statistical data, 1981-1982.

Kitwood, Tom. Review of the "Rokeach Value Survey." The Eighth Mental Measurements Yearbook, Vol. I. Highland Park, NJ.: The Gryphon Press, 1978: 1032-1033.

Massey, Morris. What You Are Is Where You Were When; How to Understand Yourself and Others. TV tape and discussion leaders guide books, Farmington Hills, MI. Magnetic Video Library. 1975.

Meyer, Edward C., GEN. Chief of Staff of the Army. Letter to author. 29 August 1982.

Saint, Crosby E., BG. Deputy Commandant, U.S. Army Command and General Staff College. Letter regarding leadership training and current developments to major unit and activity commanders. June 1982.

Sikula, Andrew F. Dean of the College of Business, California State University and widely published values researcher. Personal letter to author. 27 July 1982.

Smith, Michael L., CPT. Operations and Training Staff Officer, HQ Army Training Center, Ft. Benning, GA. Personal discussions and training program information. 1981-1982.

U.S. Army. Delta Force Electronic Conference Net. "Army Values" item 132, 7 February 1982.

U.S. Army. The Army FM 100-1. U.S. Government Printing Office: 1982 - 368-490: 8087, 14 August 1981.